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|------|----|--------|---|
| NEWS | 1 | | Web Page for STN Seminar Schedule - N. America |
| NEWS | 2 | AUG 10 | Time limit for inactive STN sessions doubles to 40 minutes |
| NEWS | 3 | AUG 18 | COMPENDEX indexing changed for the Corporate Source (CS) field |
| NEWS | 4 | AUG 24 | ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced |
| NEWS | 5 | AUG 24 | CA/Caplus enhanced with legal status information for U.S. patents |
| NEWS | 6 | SEP 09 | 50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY |
| NEWS | 7 | SEP 11 | WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus |
| NEWS | 8 | OCT 21 | Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded |
| NEWS | 9 | OCT 21 | Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models |
| NEWS | 10 | NOV 23 | Addition of SCAN format to selected STN databases |
| NEWS | 11 | NOV 23 | Annual Reload of IFI Databases |
| NEWS | 12 | DEC 01 | FRFULL Content and Search Enhancements |
| NEWS | 13 | DEC 01 | DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets |
| NEWS | 14 | DEC 02 | Derwent World Patent Index: Japanese FI-TERM thesaurus added |
| NEWS | 15 | DEC 02 | PCTGEN enhanced with patent family and legal status display data from INPADOCDB |
| NEWS | 16 | DEC 02 | USGENE: Enhanced coverage of bibliographic and sequence information |
| NEWS | 17 | DEC 21 | New Indicator Identifies Multiple Basic Patent Records Containing Equivalent Chemical Indexing in CA/Caplus |

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

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FILE 'HOME' ENTERED AT 16:40:13 ON 30 DEC 2009

=> FIL BIOSIS CAPLUS EMBASE

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|----------------------|------------------|---------------|
| FULL ESTIMATED COST | 3.96 | 3.96 |

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FILE 'EMBASE' ENTERED AT 16:50:44 ON 30 DEC 2009

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=> s anti apopto?

L1 29954 ANTI APOPTO?

=> s apoptosis (3a) inhibitor

L2 20334 APOPTOSIS (3A) INHIBITOR

=>

=> s apoptosis (3a) inhibit?

L3 74553 APOPTOSIS (3A) INHIBIT?

=> s apopto? (3a) protect?

L4 16445 APOPTO? (3A) PROTECT?

=> s l1 or l2 or l3

L5 97885 L1 OR L2 OR L3

=> s l5 and transactivat?

L6 1249 L5 AND TRANSACTIVAT?

=> s l6 and CHO

L7 7 L6 AND CHO

=> dup rem l7

PROCESSING COMPLETED FOR L7

L8 5 DUP REM L7 (2 DUPLICATES REMOVED)

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 5 ANSWERS - CONTINUE? Y/(N):y

L8 ANSWER 1 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2006:680140 BIOSIS

DN PREV200600674562

TI Mdm2-mediated NEDD8 modification of Tap73 regulates its transactivation function.

AU Watson, Ian R.; Blanch, Alvaro; Lin, Dan C. C.; Ohh, Michael; Irwin,

Meredith S. [Reprint Author]

CS Hosp Sick Children, Canc Res Program, 555 Univ Ave, Toronto, ON M5G 1X8,

Canada

meredith.irwin@sickkids.ca

SO Journal of Biological Chemistry, (NOV 10 2006) Vol. 281, No. 45, PP.

34096-34103.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 6 Dec 2006

Last Updated on STN: 6 Dec 2006

AB Mutations in p73 are rare in cancer. Emerging evidence suggests that the

relative expression of various p73 isoforms may contribute to tumorigenesis. Alternative promoters and N-terminal splicing

result in

the transcription and processing of either full-length (TA) or N-terminally truncated (Delta N) p73 isoforms. Tap73 possesses pro-apoptotic functions, while Delta Np73 has anti-apoptotic properties via functional inhibition of Tap73 and p53. Here, we report that Tap73, but not Delta Np73, is covalently

modified by

NEDD8 under physiologic conditions in an Mdm2-dependent manner. Co-expression of NEDP1, a cysteine protease that specifically

cleaves

NEDD8 conjugates, was shown to deneddylate Tap73. In addition, blockage

of the endogenous NEDD8 pathway increased Tap73-mediated transactivation of p53- and p73-responsive promoter-driven reporter activity, and in conjunction, neddylated Tap73 species were found

preferentially in the cytoplasm. These results suggest that Mdm2 attenuates Tap73 transactivation function, at least in part, by promoting NEDD8-dependent Tap73 cytoplasmic localization and provide the first evidence of a covalent post-translational modification exclusively targeting the TA isoforms of p73.

L8 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2005:638656 CAPLUS
 DN 143:127857
 TI Enhancement of transactivation system for recombinant protein expression in mammalian cells by reducing apoptosis
 IN Bebbington, Christopher Robert; Yu, Bo
 PA Kalobios, Inc., USA
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|----------|---|------|----------|-----------------|
| ----- | ----- | ---- | ----- | ----- |
| PI | WO 2005065348 | A2 | 20050721 | WO 2004-US43830 |
| 20041230 | | | | |
| | WO 2005065348 | A3 | 20051027 | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| EP | 1702071 | A2 | 20060920 | EP 2004-815827 |
| 20041230 | | | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | |

IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS
US 20090111144 A1 20090430 US 2006-585149
20060630
PRAI US 2003-533917P P 20031231
WO 2004-US43830 W 20041230
AB The present invention relates to recombinant protein expression
in a mammalian host cell using a co-expressed transcriptional
activator (transactivator). More specifically, the invention relates to the
enhancement of recombinant protein production by reducing
apoptosis in a population of cells that contain a recombinant transactivator
introduced into the cell to enhance gene expression of the
recombinant protein. In particular, the invention provides vectors, host
cells, and methods of expressing at least one desired polypeptide by
transfecting a mammalian host cell with cistrons encoding a transactivator, a
desired polypeptide, and an apoptosis-protective protein. In one
embodiment the apoptosis-protective protein is Bcl-2, or Bcl-2
having a deletion in the regulatory loop domain. In a preferred
embodiment the transactivator is an adenoviral Ela protein or a variant thereof,
more preferably an Ela protein from human Ad2, Ad5 or Ad12. In
another preferred embodiment, the transactivator is CREB
(cAMP-responsive element-binding) or its variant.
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT
L8 ANSWER 3 OF 5 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All
rights reserved on STN
AN 2005118695 EMBASE
TI Immunomodulating and anti-apoptotic action of
ursodeoxycholic acid: Where are we and where should we go?.
AU Bellentani, Stefano, Dr. (correspondence)
CS Centro Studi Fegato, AREA Science Park, Basovizza, Trieste,
Italy.
liversb@unimore.it
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CS Azienda USL di Modena, Ospedale di Carpi, Italy.
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CS Fondo Studi Fegato, Sezione di Modena, Via G. Bove, 13, 41100
Modena,
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SO European Journal of Gastroenterology and Hepatology, (Feb 2005)
Vol. 17,

No. 2, pp. 137-140.

Refs: 30

ISSN: 0954-691X CODEN: EJGHES

CY United Kingdom

DT Journal; General Review; (Review)

FS 030 Clinical and Experimental Pharmacology

037 Drug Literature Index

048 Gastroenterology

LA English

SL English

ED Entered STN: 31 Mar 2005

Last Updated on STN: 31 Mar 2005

AB Ursodeoxycholic acid (UDCA) is currently used in clinical practice

worldwide not only for the dissolution of cholesterol gallstones, but

also, mainly, to treat patients with chronic cholestatic liver diseases.

However, the mechanisms of action of UDCA at the hepatocyte and cholangiocyte levels are still not completely understood. Much progress

has been made from the first concept that the only mechanism of action of

this bile acid was its choleretic action. One of the most fascinating

mechanisms of action that was evoked for UDCA is its immunomodulating and

anti-apoptotic action, which could, in part, be

explained by its interaction with the glucocorticoid nuclear receptor at

the hepatocyte level. Glucocorticoids, whose prototype is dexamethasone,

are the major ligands of the glucocorticoid receptor. The biological

effects of glucocorticoids are driven by a multiple-step reaction including binding of the steroid to the glucocorticoid receptor,

DNA binding, receptor transformation, nuclear translocation and either

positive or negative gene transactivation. In this issue of the journal, Weitzel and co-workers clearly demonstrated that the

binding of UDCA to the glucocorticoid receptor is unspecific. Therefore,

the anti-inflammatory, cytoprotective and anti-apoptotic

actions of UDCA should be due not only to the mild interaction with the

glucocorticoid receptor, but also to transactivation or transrepression of different cytoplasmic proteins that are

involved in the survival pathway. .COPYRGT. 2005 Lippincott Williams & Wilkins.

L8 ANSWER 4 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson
 Corporation on STN
 DUPLICATE 1
 AN 2004:351886 BIOSIS
 DN PREV200400352528
 TI TATA-binding protein-associated factor 7 regulates polyamine
 transport
 activity and polyamine analog-induced apoptosis.
 AU Fukuchi, Junichi; Hiipakka, Richard A.; Kokontis, John M.;
 Nishimura,
 Kazuhiro; Igarashi, Kazuei; Liao, Shutsung [Reprint Author]
 CS Ben May Inst Canc Res, Univ Chicago, MC6027,5841 S Maryland Ave,
 Chicago,
 IL, 60637, USA
 sliao@huggins.bsd.uchicago.edu
 SO Journal of Biological Chemistry, (July 16 2004) Vol. 279, No.
 29, pp.
 29921-29929. print.
 CODEN: JBCHA3. ISSN: 0021-9258.
 DT Article
 LA English
 ED Entered STN: 26 Aug 2004
 Last Updated on STN: 26 Aug 2004
 AB Identification of the polyamine transporter gene will be useful
 for
 modulating polyamine accumulation in cells and should be a good
 target for
 controlling cell proliferation. Polyamine transport activity in
 mammalian
 cells is critical for accumulation of the polyamine analog
 methylglyoxal
 bis(guanylhydrazone) (MGBG) that induces apoptosis, although a
 gene
 responsible for transport activity has not been identified.
 Using a
 retroviral gene trap screen, we generated MGBG-resistant Chinese
 hamster
 ovary (CHO) cells to identify genes involved in polyamine
 transport activity. One gene identified by the method encodes
 TATA-binding protein-associated factor 7 (TAF7), which functions
 not only
 as one of the TAFs, but also a coactivator for c-Jun.
 TAF7-deficient
 cells had decreased capacity for polyamine uptake (20% of CHO
 cells), decreased AP-1 activation, as well as resistance to
 MGBG-induced
 apoptosis. Stable expression of TAF7 in TAF7-deficient cells
 restored
 transport activity (55% of CHO cells), AP-1 gene
 transactivation (100% of CHO cells), and sensitivity to
 MGBG-induced apoptosis. Overexpression of TAF7 in CHO cells did
 not increase transport activity, suggesting that TAF7 may be
 involved in

the maintenance of basal activity. c-Jun NH2-terminal kinase inhibitors blocked MGBG-induced apoptosis without alteration of polyamine transport. Decreased TAF7 expression, by RNA interference, in androgen-independent human prostate cancer LN-CaP104-R1 cells resulted in lower polyamine transport activity (25% of control) and resistance to MGBG-induced growth arrest. Taken together, these results reveal a physiological function of TAF7 as a basal regulator for mammalian polyamine transport activity and MGBG-induced apoptosis.

L8 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2004:123339 BIOSIS

DN PREV200400116629

TI Pro-apoptotic role of casein Kinase 2 is mediated by a JNK signaling cascade.

AU Hilgard, Philip [Reprint Author]; Gerken, Guido [Reprint Author]; Czaja,

Mark J.; Stockert, Richard J.

CS University Hospital Essen, Essen, Germany

SO Hepatology, (October 2003) Vol. 38, No. 4 Suppl. 1, pp. 241A. print.

Meeting Info.: 54th Annual Meeting of the American Association for the

Study of Liver Diseases. Boston, MA, USA. October 24-28, 2003. American

Association for the Study of Liver Diseases.

ISSN: 0270-9139 (ISSN print).

DT Conference; (Meeting)

Conference; (Meeting Poster)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 3 Mar 2004

Last Updated on STN: 3 Mar 2004

AB The tetrameric enzyme Protein Kinase CK2 plays a significant role in the

regulation of cell proliferation, malignant transformation and apoptosis.

The catalytic alpha-subunit of the enzyme is known to exist in three

isoforms, CK2alpha, CK2alpha' and the recently described CK2alpha",

predominately located in the nuclear matrix of hepatocytes.

Preliminary

studies suggested that CK2alpha" plays a pivotal role in the induction of

cell death. The AIM of the present study was to determine the mechanism

whereby CK2alpha" regulates hepatocellular apoptosis. METHODS

and

RESULTS: When compared to wildtype (wt) HuH-7 cells, the CK2alpha" (-/-)

Trf1 mutant cell line was resistant to apoptosis induced by a variety of cell death stimuli as determined by the MTT assay. By 90 h post-infection with dengue virus (DEN), 85-90% of the wt-HuH-7 cells had undergone cell death, in comparison to only 6% of Trf1 cells. After TNF treatment, 80% of wt-HuH-7 cells died within 48 h, but death in Trf1 cells was less than 10%. For other death stimuli, the reduction in cell death between wt-HuH-7 and Trf1 ranged from 75% for menadione, 62% for okadaic acid, 55% for H2O2, 50% for UV-light, to 43% for acetaminophen. The resistant phenotype was reverted by stable transfection of Trf1 cells with recombinant CK2alpha", which re-sensitized Trf1 cells to death induced by DEN, TNF and UV. Flowcytometric measurement of DNA hypoploidy revealed that DEN and TNF induced DNA fragmentation indicating that apoptosis was the predominant cause of cell death. Immunoblot analysis revealed that DEN infection did not induce caspase-3 or -8 activation in either cell line. In contrast, TNF treatment induced caspase activation in wt-HuH-7 with no effect in Trf1 cells. This differential response was confirmed by the selective inhibition of TNF induced apoptosis in wt-HuH-7 by the pan-caspase inhibitor Z-VAD-FMK and the caspase-3 inhibitor DEVD-CHO, while DEN induced cell death was unaffected. Mitochondrial permeability as indicated by the release of cytochrome c occurs upstream of caspase activation in different death pathways. Immunoblot analysis showed that DEN infection resulted in equal increases in cytoplasmic cytochrome c levels in both wt-HuH-7 and Trf1, as opposed to TNF, which had no effect. As CK2 has several potential links to NF-kappaB, induction of this pathway by DEN infection and TNF treatment was assessed either by the phosphorylation of IkappaB or by a luciferase

assay of NF-kappaB transactivation. TNF induced equal
 activation of NF-kappaB in both cell lines. DEN infection did
 not result
 in NF-kappaB activation in either cell line. Evaluation of JNK
 related
 pathways involved in death signaling revealed a dramatic
 deficiency of
 c-Jun phosphorylation after stimulation with DEN or TNF in Trf1
 cells
 without affecting the absolute concentration of either JNK or
 c-Jun. To
 test the significance of c-Jun in HuH-7 death signaling, cells
 were
 pre-infected with a dominant negative c-Jun expressing
 adenovirus. TNF
 induced cell death was reduced from 75% to 20% in infected
 wt-HuH-7 cells.
 The difference in JNK activity translated into a differential
 AP-1
 activation in the two cell lines. The initial AP-1 activity in
 untreated
 Trf1 cells was only 25% of that found in wt-HuH-7 cells. TNF
 treatment
 resulted in a 1.5 fold increase of AP-1 dependent reporter
 transcription
 in both cell lines thereby retaining the initial differential.
 DEN
 infection increased AP-1 activity in wt-HuH-7, while activity
 remained
 unchanged or slightly decreased in Trf1 cells. Consistent with a
 pro-apoptotic role for JNK, pretreatment with the JNK inhibitor
 SP600125
 reduced TNF and DEN induced cell death in wt-HuH-7 by more than
 three
 fold. CONCLUSION: These results suggest a role for the
 JNK/c-Jun/AP-1
 signal cascade in the regulation of a critical CK2alpha"
 dependent
 pro-apoptotic step in HuH-7 cells.

=> s ucoe
 L9 36 UCOE

=> s ubiquitous chromatin opening element
 L10 12 UBIQUITOUS CHROMATIN OPENING ELEMENT

=> s 19 or 110
 L11 37 L9 OR L10

=> s 111 and hnRNP A2
 L12 2 L11 AND HNRNP A2

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L12 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2005:638656 CAPLUS

DN 143:127857

TI Enhancement of transactivation system for recombinant protein expression

in mammalian cells by reducing apoptosis

IN Bebbington, Christopher Robert; Yu, Bo

PA Kalobios, Inc., USA

SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|------------|---|------|----------|-----------------|
| ----- | ----- | ---- | ----- | ----- |
| PI | WO 2005065348 | A2 | 20050721 | WO 2004-US43830 |
| 20041230 | | | | |
| | WO 2005065348 | A3 | 20051027 | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW | | | |
| | RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | |
| EP 1702071 | | A2 | 20060920 | EP 2004-815827 |
| 20041230 | | | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS | | | |
| | US 20090111144 | A1 | 20090430 | US 2006-585149 |
| 20060630 | | | | |

PRAI US 2003-533917P P 20031231
WO 2004-US43830 W 20041230

AB The present invention relates to recombinant protein expression in a

mammalian host cell using a co-expressed transcriptional activator (transactivator). More specifically, the invention relates to the

enhancement of recombinant protein production by reducing apoptosis in a population of cells that contain a recombinant transactivator introduced

into the cell to enhance gene expression of the recombinant protein. In

particular, the invention provides vectors, host cells, and methods of

expressing at least one desired polypeptide by transfecting a mammalian

host cell with cistrons encoding a transactivator, a desired polypeptide,

and an apoptosis-protective protein. In one embodiment the apoptosis-protective protein is Bcl-2, or Bcl-2 having a deletion in the

regulatory loop domain. In a preferred embodiment the transactivator is

an adenoviral Ela protein or a variant thereof, more preferably an Ela

protein from human Ad2, Ad5 or Ad12. In another preferred embodiment, the

transactivator is CREB (cAMP-responsive element-binding) or its variant.

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2000:85020 CAPLUS

DN 132:133229

TI A polynucleotide comprising a ubiquitous chromatin opening element (UCOE)

IN Antoniou, Michael; Crombie, Robert

PA Cobra Therapeutics Limited, UK

SO PCT Int. Appl., 188 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO.

DATE

PI WO 2000005393
19990721

A2

20000203

WO 1999-GB2357

| | | | | |
|----------|---|----|----------|------------------|
| WO | 2000005393 | A3 | 20000817 | |
| CU, CZ, | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, | | | |
| IN, IS, | DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, | | | |
| MG, MK, | JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, | | | |
| SL, TJ, | MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, | | | |
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| | ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, | | | |
| | CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| 19990721 | CA 2333852 | A1 | 20000203 | CA 1999-2333852 |
| | CA 2333852 | C | 20070529 | |
| | AU 9950534 | A | 20000214 | AU 1999-50534 |
| 19990721 | AU 771111 | B2 | 20040311 | |
| | EP 1098986 | A2 | 20010516 | EP 1999-934910 |
| 19990721 | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, | | | |
| MC, PT, | IE, SI, LT, LV, FI, RO | | | |
| 19990721 | JP 2002522027 | T | 20020723 | JP 2000-561339 |
| | JP 4220673 | B2 | 20090204 | |
| | US 20020106789 | A1 | 20020808 | US 1999-358082 |
| 19990721 | US 6689606 | B2 | 20040210 | |
| | CN 100365127 | C | 20080130 | CN 1999-811155 |
| 19990721 | CN 101260384 | A | 20080910 | CN 2007-10193347 |
| 19990721 | KR 795626 | B1 | 20080117 | KR 2001-700883 |
| 20010119 | MX 2001000830 | A | 20020604 | MX 2001-830 |
| 20010122 | US 20030018986 | A1 | 20030123 | US 2002-224972 |
| 20020821 | US 20030061627 | A1 | 20030327 | US 2002-224993 |
| 20020821 | US 20030061628 | A1 | 20030327 | US 2002-225418 |
| 20020821 | US 6964951 | B2 | 20051115 | |
| | US 20030082599 | A1 | 20030501 | US 2002-225073 |
| 20020821 | US 6881556 | B2 | 20050419 | |
| | JP 2005052149 | A | 20050303 | JP 2004-293969 |
| 20041006 | | | | |

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|--------------------|----|----------|----------------|
| US 20050181428 | A1 | 20050818 | US 2005-87052 |
| 20050322 | | | |
| US 7442787 | B2 | 20081028 | |
| KR 2007108336 | A | 20071109 | KR 2007-103583 |
| 20071015 | | | |
| JP 2008109931 | A | 20080515 | JP 2007-285560 |
| 20071101 | | | |
| JP 2009102331 | A | 20090514 | JP 2008-305611 |
| 20081128 | | | |
| KR 2009117675 | A | 20091112 | KR 2009-93097 |
| 20090930 | | | |
| PRAI GB 1998-15879 | A | 19980721 | |
| US 1998-107688P | P | 19981109 | |
| GB 1999-6712 | A | 19990323 | |
| US 1999-127410P | P | 19990401 | |
| GB 1999-9494 | A | 19990423 | |
| US 1999-134016P | P | 19990512 | |
| CN 1999-811155 | A3 | 19990721 | |
| JP 2000-561339 | A3 | 19990721 | |
| US 1999-358082 | A3 | 19990721 | |
| WO 1999-GB2357 | W | 19990721 | |
| KR 2001-700883 | A3 | 20010119 | |
| US 2002-225418 | A1 | 20020821 | |
| JP 2004-293969 | A3 | 20041006 | |
| KR 2007-103583 | A3 | 20071015 | |
| JP 2007-285560 | A3 | 20071101 | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to a polynucleotide comprising a ubiquitous chromatin opening element (UCOE) which is not derived from an LCR (locus control region). UCOE element are provided from genomic clones of the human TATA-binding protein (TBP) gene locus and the human heterogeneous nuclear ribonucleoprotein (hnRNP) A2 gene locus. Sequence anal. reveals that the TBP promoter regions are contained with a methylation-free, CpG-island. The TBP and hn RNP-A2 gene loci share the common feature of closely linked, divergently transcribed promoters. The UCOE substantially improves gene expression in the context of adenovirus, a non-integrating vector of great potential in gene therapy, and also elevates expression from weak but specific promoters to much more useful levels with retention of useful specificity. The present invention also relates to a vector comprising the polynucleotide sequence, a host cell comprising the vector, use of the polynucleotide, vector or host cell in therapy and in an assay, and a method of identifying UCOEs.

The

UCOE opens chromatin or maintains chromatin in an open state and facilitates reproducible expression of an operably-linked gene in cells of

at least two different tissue types.

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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(FILE 'HOME' ENTERED AT 16:40:13 ON 30 DEC 2009)

FILE 'BIOSIS, CAPLUS, EMBASE' ENTERED AT 16:50:44 ON 30 DEC 2009

L1 29954 S ANTI APOPTO?
L2 20334 S APOPTOSIS (3A) INHIBITOR
L3 74553 S APOPTOSIS (3A) INHIBIT?
L4 16445 S APOPTO? (3A) PROTECT?
L5 97885 S L1 OR L2 OR L3
L6 1249 S L5 AND TRANSACTIVAT?
L7 7 S L6 AND CHO
L8 5 DUP REM L7 (2 DUPLICATES REMOVED)
L9 36 S UCOE
L10 12 S UBIQUITOUS CHROMATIN OPENING ELEMENT
L11 37 S L9 OR L10
L12 2 S L11 AND HNRNP A2

=> s l6 and antibody

L13 60 L6 AND ANTIBODY

=> dup rem l13

PROCESSING COMPLETED FOR L13

L14 40 DUP REM L13 (20 DUPLICATES REMOVED)

=> d bib abs 1-

YOU HAVE REQUESTED DATA FROM 40 ANSWERS - CONTINUE? Y/(N):y

L14 ANSWER 1 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson
Corporation on STN
DUPLICATE 1

AN 2009:418008 BIOSIS

DN PREV200900419111

TI delta-Opioid receptor-stimulated Akt signaling in neuroblastoma
x glioma

(NG108-15) hybrid cells involves receptor tyrosine
kinase-mediated PI3K

activation.

AU Heiss, Anika; Ammer, Hermann; Eisinger, Daniela A. [Reprint
Author]

CS Univ Munich, Inst Pharmacol Toxicol and Pharm, Koeniginstr 16,
D-80539

Muenchen Federal, Germany
eisinger@pharmtox.vetmed.uni-muenchen.de

SO Experimental Cell Research, (JUL 15 2009) Vol. 315, No. 12, pp. 2115-2125.

CODEN: ECREAL. ISSN: 0014-4827.

DT Article

LA English

ED Entered STN: 15 Jul 2009

Last Updated on STN: 15 Jul 2009

AB delta-Opioid receptor (DOR) agonists possess cytoprotective properties, an

effect associated with activation of the "pro-survival" kinase

Akt. Here

we delineate the signal transduction pathway by which opioids

induce Akt

activation in neuroblastoma x glioma (NG108-15) hybrid cells.

Exposure of

the cells to both [D-Pen(2,5)]enkephalin and etorphine resulted

in a time-

and dose-dependent increase in Akt activity, as measured by

means of an

activation-specific antibody recognizing phosphoserine-473.

DOR-mediated Akt signaling is blocked by the opioid antagonist

naloxone

and involves inhibitory G(i/o) proteins, because pre-treatment

with

pertussis toxin, but not overexpression of the G(q/11)

scavengers EBP50

and GRK2-K220R, prevented this effect. Further studies with

Wortmannin

and LY294002 revealed that phosphoinositol-3-kinase (PI3K) plays

a central

role in opioid-induced Akt activation. Opioids stimulate Akt

activity

through transactivation of receptor tyrosine kinases (RTK),

because pre-treatment of the cells with inhibitors for

neurotrophin

receptor tyrosine kinases (AG879) and the insulin-like growth

factor

receptor IGF-1 (AG1024), but not over-expression of the G beta

gamma

scavenger phosducin, abolished this effect. Activated Akt

translocates to

the nuclear membrane, where it promotes GSK3 phosphorylation and

prevents

caspase-3 cleavage, two key events mediating inhibition of cell

apoptosis and enhancement of cell survival. Taken together,

these

results demonstrate that in NG108-15 hybrid cells DOR agonists

possess

cytoprotective properties mediated by activation of the

RTK/PI3K/Akt

signaling pathway. (C) 2009 Elsevier Inc. All rights reserved.

L14 ANSWER 2 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2009511775 EMBASE

TI Recent advances in the use of cell-penetrating peptides for medical and

biological applications.

AU Fonseca, Sonali B.; Pereira, Mark P.; Kelley, Shana O.

(correspondence)

CS Department of Pharmaceutical Sciences, Leslie Dan Faculty of Pharmacy,

University of Toronto, Ont., Canada. shana.kelley@utoronto.ca

AU Kelley, Shana O. (correspondence)

CS Department of Biochemistry, Faculty of Medicine, University of Toronto,

Ont., Canada. shana.kelley@utoronto.ca

SO Advanced Drug Delivery Reviews, (30 Sep 2009) Vol. 61, No. 11, pp.

953-964.

Refs: 122

ISSN: 0169-409X CODEN: ADDREP

PB Elsevier, P.O. Box 211, Amsterdam, 1000 AE, Netherlands.

PUI S 0169-409X(09)00199-9

CY Netherlands

DT Journal; General Review; (Review)

FS 026 Immunology, Serology and Transplantation

027 Biophysics, Bioengineering and Medical Instrumentation

029 Clinical and Experimental Biochemistry

037 Drug Literature Index

039 Pharmacy

052 Toxicology

LA English

SL English

ED Entered STN: 6 Nov 2009

Last Updated on STN: 6 Nov 2009

AB The selective permeability of the plasma membrane prohibits most exogenous

agents from gaining cellular access. Since many therapeutics and reporter

molecules must be internalized for activity, crossing the plasma membrane

is essential. A very effective class of transporters harnessed for this

purpose are cell penetrating peptides (CPPs), a group of short cationic

sequences with a remarkable capacity for membrane translocation.

Since

their discovery in 1988, CPPs have been employed for the delivery of a

wide variety of cargo including small molecules, nucleic acids, antibodies

and nanoparticles. This review describes recent advances in the use of CPPs for biological and therapeutic applications. In particular, an emphasis is placed on novel systems and insights acquired since 2006. Basic research on CPPs has recently yielded techniques that provide further information on the controversial mechanism of CPP uptake and has also resulted in the development of new model membrane systems to evaluate these mechanisms. In addition, recent use of CPPs for the development of new cellular imaging tools, biosensors, or biomolecular delivery systems have been highlighted. Lastly, novel peptide delivery vectors, designed to tackle some of the drawbacks of CPPs and enhance their versatility, will be described. This review will illustrate the diverse applications for which CPPs have been harnessed and also demonstrate the remarkable advancements these peptides have facilitated in cell biology.

.COPYRGT.

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L14 ANSWER 3 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

DUPLICATE 2

AN 2008:225618 BIOSIS

DN PREV200800224841

TI A novel role of sprouty 2 in regulating cellular apoptosis.

AU Edwin, Francis; Patel, Tarun B. [Reprint Author]

CS Loyola Univ, Stritch Sch Med, Dept Pharmacol, 2160 S 1st Ave, Maywood, IL

60153 USA

tpatel7@lumc.edu

SO Journal of Biological Chemistry, (FEB 8 2008) Vol. 283, No. 6, PP.

3181-3190.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 26 Mar 2008

Last Updated on STN: 26 Mar 2008

AB Sprouty (SPRY) proteins modulate receptor-tyrosine kinase signaling and,

thereby, regulate cell migration and proliferation. Here, we have

examined the role of endogenous human SPRY2 (hSPRY2) in the regulation of

cellular apoptosis. Small inhibitory RNA-mediated silencing of hSPRY2 abolished the anti-apoptotic action of serum in adrenal cortex adenocarcinoma (SW13) cells. Silencing of hSPRY2 decreased serum- or epidermal growth factor (EGF)-elicited activation of AKT and ERK1/2 and reduced the levels of EGF receptor. Silencing of hSPRY2 also inhibited serum- induced activation of p90RSK and decreased phosphorylation of pro-apoptotic protein BAD (BCL2-antagonist of cell death) by p90RSK. Inhibiting both the ERK1/2 and AKT pathways abolished the ability of serum to protect against apoptosis, mimicking the effects of silencing hSPRY2. Serum transactivated the EGF receptor (EGFR), and inhibition of the EGFR by a neutralizing antibody attenuated the anti-apoptotic actions of serum. Consistent with the role of EGFR and perhaps other growth factor receptors in the antiapoptotic actions of serum, the tyrosine kinase binding domain of c-Cbl (Cbl-TKB) protected against down-regulation of the growth factor receptors such as EGFR and preserved the antiapoptotic actions of serum when hSPRY2 was silenced. Additionally, silencing of Spry2 in c-Cbl null cells did not alter the ability of serum to promote cell survival. Moreover, reintroduction of wild type hSPRY2, but not its mutants that do not bind c-Cbl or CIN85 into SW13 cells after endogenous hSPRY2 had been silenced, restored the anti-apoptotic actions of serum. Overall, we conclude that endogenous hSPRY2-mediated regulation of apoptosis requires c-Cbl and is manifested by the ability of hSPRY2 to sequester c-Cbl and thereby augment signaling via growth factor receptors.

L14 ANSWER 4 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

AN 2008481233 EMBASE
 TI Leptin stimulates the proliferation of human oesophageal adenocarcinoma

cells via HB-EGF- and TGF α -mediated transactivation of the epidermal growth factor receptor.

AU Ogunwobi, O.O.; Beales, Ian L.P.

CS Biomedical Research Centre, School of Medicine, Health Policy and Practice, University of East Anglia, Norwich NR4 7TJ, United Kingdom.

i.beales@uea.ac.uk

AU Beales, Ian L.P.

CS Gastroenterology Department, Norfolk and Norwich University Hospital,

Norwich NR4 7UZ, United Kingdom. i.beales@uea.ac.uk

AU Beales, I., Dr. (correspondence)

CS School of Medicine, Health Policy and Practice, University of East Anglia,

Norwich NR4 7TJ, United Kingdom. i.beales@uea.ac.uk

SO British Journal of Biomedical Science, (2008) Vol. 65, No. 3, pp. 121-127.

Refs: 30

ISSN: 0967-4845 CODEN: BJMSEO

PB Step Publishing Ltd, Tunbridge Wells, Kent, TN2 3DR, United Kingdom.

CY United Kingdom

DT Journal; Article

FS 003 Endocrinology

005 General Pathology and Pathological Anatomy

011 Otorhinolaryngology

016 Cancer

029 Clinical and Experimental Biochemistry

048 Gastroenterology

LA English

SL English

ED Entered STN: 23 Oct 2008

Last Updated on STN: 23 Oct 2008

AB Obesity increases the risk of developing oesophageal adenocarcinoma (OAC)

as well as several other cancers. Leptin is secreted by adipocytes and

serum leptin levels rise with body mass index. Leptin stimulates proliferation and inhibits apoptosis in OAC cells but the mechanisms are not fully elucidated, Transactivation of the epidermal growth factor receptor (EGFR) is an important

signalling

mechanism for G-protein-coupled receptors, but the relationship with

leptin-type receptors has not been examined and the authors hypothesise

that leptin-induced proliferation involves EGFR signalling.

This study

examines the effect of leptin of EGFR signalling in cultured cell lines.

Leptin stimulated proliferation in four OAC lines expressing leptin

receptors (OE33, OE19, BIC-1 and FLO) and this was abolished by specific

EGFR inhibitors (PD153035 and AG1478). Leptin-induced proliferation was

inhibited by neutralising antibodies to transforming growth factor- α (TGF α and HB-EGF) but not by anti-amphiregulin. Leptin significantly increased gene expression of HB-EGF and TGF α as measured by a quantitative real-time polymerase chain reaction (PCR) method but did not alter amphiregulin and EGFR gene expression. Leptin increased extracellular release of HB-EGF and TGF α and this was blocked by matrix metalloproteinase (MMP) inhibitors. The MMP inhibitors also abolished leptin-induced proliferation as well as leptin-induced EGFR tyrosine phosphorylation, but did not affect proliferation or EGFR activation induced by TGF α . The authors conclude that leptin stimulates OAC proliferation via increased gene expression of HB-EGF and TGF α , MMP-mediated extracellular release of HB-EGF and TGF α and subsequent activation of EGFR.

L14 ANSWER 5 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2009:1447245 CAPLUS

TI Involvement of Ang II in ischemia-induced angiogenesis

AU de Gasparo, M.; Levy, B. I.

CS MG Consulting Co, Rossemaison, 2842, Switz.

SO Conference of the European Society for Microcirculation, Proceedings,

25th, Budapest, Hungary, Aug. 26-29, 2008 (2008), 31-35.

Editor(s):

Koller, Akos. Publisher: Monduzzi Editore, Bologna, Italy.

CODEN: 69MCMD; ISBN: 978-88-7587-461-2

DT Conference

LA English

AB Most of available data evidence that the Ang II-induced AT1 receptor

pathway promotes neovascularization that involves activation of VEGF/ROS/eNOS-related pathways and of the inflammatory cascade.

The role

of the AT2 receptor remains enigmatic: various studies report either an

anti-angiogenic or a pro-angiogenic effect of the AT2 receptor.

These

contrasting results could be due to the balance of the AT1/AT2 receptor in

a variety of models and to the pathophysiol. environment during the

studies. Ang II plays an important role in regulating vessel growth and

neovascularization, particularly in ischemic tissue. The resp.

role of

the AT1 and AT2 receptors remains however controversial. The

AT1 receptor

Ang II stimulates the hypoxia-inducible factors and various growth factors related pathways and controls the inflammatory reaction. A low oxygen environment increases the hypoxia inducible factor HIF-1 expression in blocking its proteasomic degradation and in stimulating its binding to the hypoxia responsive element of the VEGF gene promoter that activates new blood vessel formation. HIF-1 pathway may also be triggered by insulin, IGF, endothelin and Ang II. Binding of Ang II to the AT1 receptor under nonhypoxic conditions activates HIF-1 gene transcription through a DAG-sensitive PKC pathway. In addition, the Ang II-induced ROS-dependent activation of the PI3K/Akt pathways maintains a high level of HIF-1 in stabilizing HIF-1 mRNA and stimulating its translation. Furthermore, Ang II binding to the AT1 receptor stimulates HIF-1 and transactivates the VEGF receptor, which dimerizes, auto-phosphorylates and stimulates PI3K and Akt leading to eNOS activation, NO production, inhibition of apoptosis and stimulation of angiogenesis. Both AT1 receptor blockade, VEGF neutralizing antibody or VEGF antisense oligomers as well as eNOS deficiency prevent the angiogenic effect of Ang II whereas overexpression of eNOS caused a marked increase in neocapillary formation. Similarly, Ang II through its binding to the AT1 receptor can transactivate various growth factors Tyr-kinase receptors such as bFGF, EGF, PDGF. Ang II transactivates EGF receptors and stimulates angiopoietin 2 formation and MMP stimulation causing vessel growth and remodeling. Finally, Ang II bound to the AT1 receptor stimulates NADPH oxidase and superoxide formation initiating neovascularization. This ROS-dependent pathway is responsible for activation of the cytoplasmic transcription factor NFkB leading to the upregulation of various chemokine and cytokines such as VCAM, ICAM, E selectin, MCP-1 and IL-6. MCP-1 activates monocytes during collateral artery growth in vivo and enhances collateral growth and capillary sprouting after femoral artery occlusion. Inflammatory macrophages and

lymphocytes as well as expression of VEFG and MCP-1 are suppressed in ischemic tissues of AT1 receptor deleted mice. As a whole, Ang II-induced

AT1 receptor pathway promotes neovascularization that involves activation

of VEGF/ROS/eNOS-related pathways and of the inflammatory cascade. This

effect is inhibited with AT1 receptor antagonists and in AT1 receptor deleted mice.

RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 6 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:482933 CAPLUS

DN 146:498810

TI Cancer serum markers identified for use in hybridization- and amplification-based diagnosis of early stage human breast cancer

IN Krause, Alexander; Leissner, Philippe; Paye, Malick; Mougin, Bruno;

Schweighoffer, Fabien; Bracco, Laurent

PA Biomerieux S. A., Fr.; Exonhit Therapeutics S. A.

SO PCT Int. Appl., 175pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|-------|------------|------|-------|-----------------|
| ----- | ----- | ---- | ----- | ----- |

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|----|---------------|----|----------|-----------------|
| PI | WO 2007048978 | A2 | 20070503 | WO 2006-FR51108 |
|----|---------------|----|----------|-----------------|

20061026

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| | WO 2007048978 | A3 | 20070907 | |
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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,

KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD,

MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,

PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,

TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

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BW, GH, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,
 AZ, BY, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 20051028 FR 2892730 A1 20070504 FR 2005-11080
 20060331 FR 2899239 A1 20071005 FR 2006-2824
 20061026 EP 1957672 A2 20080820 EP 2006-831300

TR R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,

JP 2009513125 T 20090402 JP 2008-537158
 20061026 IN 2008CN02437 A 20090320 IN 2008-CN2437
 20080515 CN 101365802 A 20090211 CN 2006-80046433
 20080610 US 20090269744 A1 20091029 US 2009-91835
 20090507 PRAI FR 2005-11080 A 20051028
 FR 2006-2824 A 20060331
 WO 2006-FR51108 W 20061026

AB The invention concerns methods and compns. that can be used for detecting

cancer in mammals, particularly humans. The invention particularly concerns serum markers of cancers and their use in diagnostic procedures.

The invention also concerns tools and/or kits that can be used for

carrying out these methods (reagents, probes, primers, antibodies, chips, cells, etc.), the preparation thereof and their use. The invention can be used for detecting the presence or the progression of a cancer in mammals,

particularly breast cancer including during early stages. The invention

concerns methods and compns. that can be used for detecting breast cancer

in mammals, particularly humans. Microarray technol. enabled detection of genes with differential expression in the early stages of human breast

cancer, when tumors would be most likely missed by mammog. These genes

represent proteins implicated in TLR stimulation, cytokine secretion, T

lymphocyte activation, and production of chemokines and interleukins, indicating the presence or increased risk of developing breast cancer.

The identification of these breast cancer serum markers in combination with selective nucleic acid amplification and hybridization protocols

enables their use for detecting the presence or the progression of breast

cancer. The invention also concerns tools and/or kits that can be used

for carrying out these methods (reagents, probes, primers, antibodies,

chips, cells, etc.), the preparation thereof and their use.

L14 ANSWER 7 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2007:284115 CAPLUS

DN 146:352574

TI Double-stranded RNAs and their use for downregulating genes and treating

cardiovascular diseases

IN Chajut, Ayelet; Pinner, Elhanan

PA Quark Biotech, Inc., USA

SO PCT Int. Appl., 145pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|----------|---|------|----------|-----------------|
| ----- | ----- | ---- | ----- | ----- |
| PI | WO 2007029249 | A2 | 20070315 | WO 2006-IL1036 |
| 20060906 | | | | |
| | WO 2007029249 | A3 | 20090430 | |
| | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, | | | |
| CA, CH, | | | | |
| | CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, | | | |
| GB, GD, | | | | |
| | GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, | | | |
| KN, KP, | | | | |
| | KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, | | | |
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| RO, RS, | | | | |
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| TT, TZ, | | | | |
| | UA, UG, US, UZ, VC, VN, ZA, ZM, ZW | | | |
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BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY,
KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
EP 1933880 A2 20080625 EP 2006-796071
20060906
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,
TR, AL,

BA, HR, MK, RS
JP 2009507484 T 20090226 JP 2008-529781
20060906
PRAI US 2005-715414P P 20050909
US 2005-732188P P 20051031
WO 2006-IL1036 W 20060906
AB The invention relates to a double-stranded compound, such as
siRNAs, which
down-regulates the expression of one or more
cardiovascular-related gene.
The invention also relates to a pharmaceutical composition
comprising the
compound, or a vector capable of expressing the
oligoribonucleotide compound,
and a pharmaceutically acceptable carrier. The present
invention also
contemplates a method of treating a patient suffering from a
cardiovascular disorder or other diseases comprising
administering to the
patient the pharmaceutical composition in a therapeutically ED
so as to thereby
treat the patient.

L14 ANSWER 8 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson
Corporation on STN
DUPLICATE 3
AN 2007:209660 BIOSIS
DN PREV200700198193
TI Hypoxia induces p53-dependent transactivation and
Fas/CD95-dependent apoptosis.
AU Liu, T.; Laurell, C.; Selivanova, G.; Lundeberg, J.; Nilsson,
P.; Wiman,
K. G. [Reprint Author]
CS Karolinska Inst, Canc Ctr Karolinska, Dept Oncol Pathol, SE-17176
Stockholm, Sweden
Klas.Wiman@ki.se
SO Cell Death and Differentiation, (MAR 2007) Vol. 14, No. 3, pp.
411-421.
ISSN: 1350-9047.
DT Article
LA English

ED Entered STN: 21 Mar 2007
Last Updated on STN: 21 Mar 2007
AB p53 triggers apoptosis in response to cellular stress. We analyzed p53-dependent gene and protein expression in response to hypoxia using wild-type p53-carrying or p53 null HCT116 colon carcinoma cells. Hypoxia induced p53 protein levels and p53-dependent apoptosis in these cells. cDNA microarray analysis revealed that only a limited number of genes were regulated by p53 upon hypoxia. Most classical p53 target genes were not upregulated. However, we found that Fas/CD95 was significantly induced in response to hypoxia in a p53-dependent manner, along with several novel p53 target genes including ANXA1, DDIT3/ GADD153 (CHOP), SEL1L and SMURF1. Disruption of Fas/CD95 signalling using anti-Fas-blocking antibody or a caspase 8 inhibitor abrogated p53-induced apoptosis in response to hypoxia. We conclude that hypoxia triggers a p53-dependent gene expression pattern distinct from that induced by other stress agents and that Fas/CD95 is a critical regulator of p53-dependent apoptosis upon hypoxia.

L14 ANSWER 9 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

AN 2008287039 EMBASE
TI HIV Tat protein increases bcl-2 expression of CD4+ T lymphocytes and inhibits CD4+ T lymphocytes apoptosis induced by TNF- α related apoptosis induced ligand (TRAIL).
AU Zheng, Lin; Yang, Yi-Da (correspondence); Sheng, Ji-Fang; Lu, Guo-Cai; Li, Lan-Juan
CS Department of Infectious Diseases, Medical College, Zhejiang University, Hangzhou 310003, China. yidayang@hotmail.com
SO Chinese Journal of Microbiology and Immunology, (30 Apr 2007)
Vol. 27, No. 4, pp. 302-305.
Refs: 9
ISSN: 0254-5101 CODEN: ZWMZDP
PB Society of Microbiology and Immunology, Chaoyangqu, Beijing, 100024,

China.
CY China
DT Journal; Article
FS 004 Microbiology: Bacteriology, Mycology, Parasitology and
Virology
026 Immunology, Serology and Transplantation
LA Chinese
SL English; Chinese
ED Entered STN: 24 Jul 2008
Last Updated on STN: 24 Jul 2008
AB Objective: To investigate the effect of HIV Tat protein on bcl-2
expression in CD4+ T lymphocytes, and Tat-stimulated CD4+ T
lymphocytes
apoptosis induced by TNF- α related apoptosis induced ligand
(TRAIL).
Methods: Western blot was used to detect the bcl-2 expression in
CD4+ T
lymphocytes stimulated by HIV Tat protein, and 7-AAD and Annexin
V were
used to detect apoptosis of Tat-stimulated CD4+ T lymphocytes
induced by
TRAIL. Results: HIV Tat protein could increase bcl-2 expression
in CD4+ T
lymphocytes. 7-AAD staining result showed that $53.85\% \pm 2.63\%$
CD4+ T
lymphocytes had apoptosis after being treated with 100 ng/ml
recombinant
TRAIL. If CD4+ T lymphocytes were pre-stimulated with HIV Tat,
only
 $16.04\% \pm 5.26\%$ cells showed apoptosis. This effect can be
inhibited by
polyclone anti-Tat. Annexin V staining showed the same results.
Conclusion: HIV Tat protein increases bcl-2 expression in CD4+ T
lymphocytes, which inhibits apoptosis induced by
TRAIL. HIV Tat protein may play an important role in mechanisms
of HIV
persistent infection in CD4+ T lymphocytes.

L14 ANSWER 10 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson
Corporation on
STN
AN 2007:599245 BIOSIS
DN PREV200700602555
TI Matrix METALLOPROTEINASE-7 (MMP-7) mediates bile acid-induced
transactivation of EGF receptors (EGFR) and proliferative
signaling in human colon cancer cells.
AU Cheng, Kunrong; Xie, Guofeng; Raufman, Jean-pierre
SO Gastroenterology, (APR 2007) Vol. 132, No. 4, Suppl. 2, pp. A14.
Meeting Info.: Digestive Disease Week Meeting/108th Annual
Meeting of the
American-Gastroenterological-Association. Washington, DC, USA.
May 19 -24,

2007. Amer Gastroenterol Assoc; Amer Assoc Study Liver Dis; Amer Soc
Gastrointestinal Endoscopy; Soc Surg Alimentary Tract.
CODEN: GASTAB. ISSN: 0016-5085.
DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)
LA English
ED Entered STN: 6 Dec 2007
Last Updated on STN: 6 Dec 2007
AB Fecal secondary bile acids arc colon cancer promoters,
Previously, we
showed that conjugated secondary bile acids promote H508 colon
cancer cell
proliferation by transactivation of EGFR(Biochem Pharmacol
2005;70:1035). To explore the mechanism underlying this action,
we tested
the hypothesis that bile acids activate a matrix
metalloproteinase (MMP)
that catalyzes release of an EGFR ligand. GM6001, a
broad-spectrum MMP
inhibitor blocked the actions of deoxycholytaurine (DCT, 50 mu
M),
thereby implicating MMP-catalyzed release of an EGFR ligand.
DCT-induced
cell proliferation was reduced by increasing concentrations of
EGFR kinase
inhibitors, by antibody to the ligand-binding domain of EGFR, by
neutralizing antibody to heparin binding-EGF-like growth factor
(HB-EGF) and by CRM197 a diphtheria toxin analogue that inhibits
HB-EGF
release. These findings and observations with more selective MMP
inhibitors suggested that MMP-7, an enzyme known to release
HB-EGF from
pro-HB-EGF in other tissues, plays a key role in mediating bile
acid-induced H508 colon cancer cell proliferation. Recombinant
HB-EGF and
MMP-7 both mimicked the signaling and proliferative actions of
bile acids.
Strikingly, reducing MMP-7 expression in H508 cells with either
neutralizing antibody or increasing concentrations of siRNA
(Fig. 1) attenuated DCT-induced cell proliferation. RT-PCR
confirmed
MMP-7 expression in H508 cells and confocal immunofluorescence
microscopy
revealed co-localization of pro-MMP-7 and proHB-EGF at the cell
surface.
Collectively, these findings provide strong evidence that in
H508 human
colon cancer cells, bile acid-induced transactivation of EGFR is
mediated by MMP7-catalyzed release of the EGFR ligand HB-EGF.
MMP-7 may
provide a novel therapeutic target to prevent the proliferative
effects of

bile acids on colon cancer.[GRAPHICS]e to strong OATPIB3 staining in a majority (67 out of 89 total specimens evaluated, 75%) of colon tumors whereas normal colon tissues (n=12) had no detectable immunostaining. Although not statistically significant, survival curves generated for high and low OATPIB3 expression in a punctate pattern demonstrated separation with an association between high OATPIB3 expression and improved survival. Conclusion: Our results suggest that OATPIB3 overexpression is an early event in colon tumorigenesis and its overexpression is observed in colonic tumors of all stages. OATPIB3 overexpression in colon cancer may confer a survival advantage through anti-apoptotic/pro-survival pathways. Further studies are on-going to comprehensively assess the functional and prognostic significance of OATPIB3 overexpression in colon cancers.

L14 ANSWER 11 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2006:298902 CAPLUS
 DN 144:348544
 TI Genes showing changes in level of expression in response to cardiac pressure overload and their use in the prediction, prophylaxis and treatment of heart disease
 IN Wagner, Roger A.; Tabibiazar, Raymond; Quertermous, Thomas
 PA The Board of Trustees of the Leland Stanford Junior University, USA
 SO PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|----------|--|------|----------|-----------------|
| PI | WO 2006034356 | A2 | 20060330 | WO 2005-US33853 |
| 20050920 | | | | |
| | WO 2006034356 | A9 | 20060622 | |
| | WO 2006034356 | A3 | 20090416 | |
| CA, CH, | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, | | | |

LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW,
 MX, MZ,
 NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
 SE, SG,
 SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
 VC, VN,
 YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR,
 BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG,
 BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY,

KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
 CA 2580191 A1 20060330 CA 2005-2580191

20050920
 US 20060094038 A1 20060504 US 2005-231700

20050920
 EP 1797199 A2 20070620 EP 2005-806752

20050920
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
 HU, IE,

IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK,
 TR, AL,

BA, HR, MK, YU
 JP 2008515394 T 20080515 JP 2007-532650

20050920
 PRAI US 2004-611674P P 20040920

WO 2005-US33853 W 20050920

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
 AB Genes showing altered levels of expression in response to

cardiac overload
 are identified. Anal. of expression of these genes can be used
 in the

diagnosis or assessment of susceptibility of an individual to
 heart

failure from many etiologies, as well as the presence and
 severity of
 hypertrophy, chamber enlargement, or systolic heart failure.

Also provided
 are therapeutic methods for treating a heart patient or methods
 for

prophylactically treating an individual susceptible to heart
 failure.

Addnl., the invention describes screening methods for
 identifying agents

that can be administered to treat individuals that have suffered
 a heart

attack or are at risk of heart failure.

OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4
 CITINGS)

L14 ANSWER 12 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

AN 2006256999 EMBASE

TI Oncogenic RAS mutations in myeloma cells selectively induce cox-2 expression, which participates in enhanced adhesion to fibronectin and chemoresistance.

AU Lichtenstein, Alan (correspondence)

CS Department of Hematology-Oncology, WlllH, VA West LA Hospital, 11301 Wilshire Blvd, Los Angeles, CA 90073, United States.
alan.lichtenstein@med.va.gov

AU Hoang, Bao; Zhu, Li; Shi, Yijiang; Frost, Patrick; Yan, HuaJun; Sharma, Sanjai; Sharma, Sherven; Goodglick, Lee; Dubinett, Steven

SO Blood, (1 Jun 2006) Vol. 107, No. 11, pp. 4484-4490.
Refs: 36
ISSN: 0006-4971; E-ISSN: 0006-4971 CODEN: BLOOAW

CY United States

DT Journal; Article

FS 016 Cancer
022 Human Genetics
025 Hematology
029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 28 Jun 2006
Last Updated on STN: 28 Jun 2006

AB Oncogenic RAS expression occurs in up to 40% of multiple myeloma (MM) cases and correlates with aggressive disease. Since activated RAS induces cyclooxygenase-2 (cox-2) expression in other tumor models, we tested a role for cox-2 in mutant RAS-containing MM cells. We used the ANBL-6 isogenic MM cell lines in which the IL-6-dependent parental line becomes cytokine independent following transfection with mutated N-RAS or K-RAS. Both mutated N-RAS- and K-RAS-expressing ANBL-6 cells demonstrated a selective up-regulation of cox-2 expression and enhanced secretion of PGE2, a product of cox-2. Furthermore, in 3 primary marrow specimens, which contained MM cells expressing mutated RAS, 15% to 40% of tumor cells were positive for cox-2 expression by immunohistochemistry. We used cox-2

inhibitors, NS398 and celecoxib, and neutralizing anti-PGE2 antibody to test whether cox-2/ PGE2 was involved in the aggressive phenotype of MM ANBL-6 cells containing mutated RAS.

Although

these interventions had no effect on IL-6-independent growth or adhesion

to marrow stromal cells, they significantly inhibited the enhanced binding

of mutant RAS-containing MM cells to fibronectin and the enhanced resistance to melphalan. These results indicate a selective induction of

cox-2 in MM cells containing RAS mutations, which results in heightened

binding to extracellular matrix protein and chemotherapeutic drug resistance. .COPYRG. 2006 by The American Society of Hematology.

L14 ANSWER 13 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 4

AN 2006:406716 BIOSIS

DN PREV200600404609

TI Multiple isoforms of the tumor protein p73 are expressed in the adult

human telencephalon and choroid plexus and present in the cerebrospinal fluid.

AU Cabrera-Socorro, Alfredo; Pueyo Morlans, Mercedes; Suarez Sola, Maria

Luisa; Gonzalez Delgado, Francisco J.; Castaneyra-Perdomo, Agustin; Marin,

Maria C.; Meyer, Gundela [Reprint Author]

CS Univ La Laguna, Fac Med, Dept Anat, San Cristobal la Laguna 38071, Spain

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SO European Journal of Neuroscience, (APR 2006) Vol. 23, No. 8, pp. 2109-2118.

ISSN: 0953-816X.

DT Article

LA English

ED Entered STN: 17 Aug 2006

Last Updated on STN: 17 Aug 2006

AB p73, a homolog of the p53 tumor suppressor, codes for full-length transactivating (TA) and N-terminally truncated (Delta N) isoforms, with pro- and anti-apoptotic activities, respectively. We examined the expression of the main p73 isoforms in

adult human and mouse telencephalon and choroid plexus by immunohistochemistry on paraffin sections, and immunoblotting

(IB) of

tissue extracts and cerebrospinal fluid (CSF), using antibodies against

different protein domains. Cortical neurons expressed TAp73 predominantly

in the cytoplasm and Delta Np73 mainly in the nucleus, with partial overlap in the cytoplasm. Highest expression was found in the hippocampus. IB showed an array of TAp73 variants in adult human cortex and hippocampus. IB of human choroid plexus and CSF using TAp73-specific antibodies revealed the presence of a similar to 90-kDa protein whose molecular weight was reduced after N-deglycosylation, suggesting that glycosylated TAp73 is exported into the CSF. In the mouse, high expression of TAp73 was also detected in the subcommissural organ (SCO), an ependymal gland absent in adult humans. TAp73 colocalized with anti-fibra-Reissner-antibody (AFRU), which is a marker of Reissner's fiber, the secreted SCO product. p73-deficient mice had generalized cortical hypoplasia and hydrocephalus; in addition, we observed a dramatic size reduction of the choroid plexus. However, the SCOs were apparently unaltered and continued to secrete Reissner's fiber. Our findings point to complex and widespread p73 activities in the maintenance of adult cortical neurons and in brain homeostasis. TAp73 in the CSF may play important roles in the maintenance of the adult ventricular wall as well as in the development of the proliferating neuroepithelium.

L14 ANSWER 14 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN DUPLICATE 5
AN 2006:1039784 CAPLUS
DN 146:436623

TI Inhibition of CD95-mediated apoptosis through β 1
integrin in the HSG epithelial cell line

AU Dang, Howard; Dehghan, Parastou Lizeth; Goodwiler, Kai; Chen,
Shuo;

Zardeneta, Gustavo; Zhang, Bin-Xian; Yeh, Chih-Ko
CS Departments of Community Dentistry, The University of Texas
Health Science

Center at San Antonio, San Antonio, TX, USA
SO Cell Communication & Adhesion (2006), 13(4), 223-232
CODEN: CCAEBH; ISSN: 1541-9061

PB Taylor & Francis, Inc.

DT Journal

LA English

AB The HSG cell line serves as a model for salivary gland epithelial
progenitor cell differentiation. In order for a progenitor cell

to

differentiate, the cell must maintain viability within its niche. Studies were designed to elucidate the mechanism for integrin-mediated HSG cell survival. HSG cells, grown on Matrigel, were resistant to CD95-mediated apoptosis. Western blot anal. showed that Matrigel induced the expression of bcl-2, bcl-xL, p63, and ANp63. This induction occurred by as early as 2 h and remained for 24 h. CD95-mediated apoptosis resistance was dependent, however, upon the expression of the bcl-2 family. Furthermore, Matrigel induced bcl-2 family expression was dependent on the transactivation of the EGF receptor pathway since PD98059 and AG1478 inhibited Matrigel induced bcl-2 family expression and caused HSG cells to be sensitive to CD95-mediated apoptosis. Activation of the EGF receptor pathway, by itself, however, was not sufficient to inhibit apoptosis. Blocking antibody showed that bcl-2 family expression was mediated through β 1 integrin. These studies show that salivary progenitor epithelial cell survival is integrin dependent and involves the transactivation of the EGF receptor pathway.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 15 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
AN 2005:1000571 CAPLUS
DN 143:399137
TI Combining lapatinib (GW572016), a small molecule inhibitor of ErbB1 and ErbB2 tyrosine kinases, with therapeutic anti-ErbB2 antibodies enhances apoptosis of ErbB2-overexpressing breast cancer cells
AU Xia, Wenle; Gerard, Catherine M.; Liu, Leihua; Baudson, Nathalie M.; Ory, Thierry L.; Spector, Neil L.
CS Department of Discovery Medicine, GlaxoSmithKline, Research Triangle Park, NC, 27709-3398, USA
SO Oncogene (2005), 24(41), 6213-6221
CODEN: ONCNES; ISSN: 0950-9232
PB Nature Publishing Group
DT Journal
LA English
AB Antibodies and small mol. tyrosine kinase inhibitors targeting ErbB2

exhibit distinct, noncross resistant mechanisms of action. Here, apoptosis of ErbB2-overexpressing breast cancer cells was enhanced by

combining lapatinib, an inhibitor of ErbB1 and ErbB2 tyrosine kinases,

with anti-ErbB2 antibodies, including (i) trastuzumab, a humanized monoclonal antibody, and (ii) pAb, rabbit polyclonal antisera generated by vaccination with a human ErbB2 fusion protein.

Treating

ErbB2-overexpressing breast cancer cell lines with a relatively low concentration

of lapatinib alone resulted in a minimal increase in tumor cell apoptosis

with an associated decrease in steady-state protein levels of p-ErbB2, p-Akt,

p-Erk1/2, and notably survivin, compared to baseline. Exposure to pAb

alone reduced total ErbB2 protein, disrupting ErbB3 transactivation, leading to a marked inhibition of p-Akt;

however,

survivin protein levels remained unchanged and apoptosis only increased

slightly. Treatment with trastuzumab alone had relatively little effect

on survivin and apoptosis was unaffected. Combining lapatinib with either

pAb or trastuzumab markedly downregulated survivin protein and enhanced

tumor cell apoptosis. The association between the inhibition of survivin and

enhanced apoptosis following the combination of ErbB2-targeted therapies

provides a biol. effect in order to identify therapeutic strategies that

promote tumor cell apoptosis and might improve clin. response.

OSC.G 76 THERE ARE 76 CAPLUS RECORDS THAT CITE THIS RECORD (76 CITINGS)

RE.CNT 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 16 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

reserved on STN

AN 2005240724 EMBASE

TI Akt phosphorylates Tall oncoprotein and inhibits its repressor activity.

AU Palamarchuk, Alexey; Efanov, Alexey; Maximov, Vadim; Aqeilan, Rami I.;

Croce, Carlo M.; Pekarsky, Yuri (correspondence)

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SO Cancer Research, (1 Jun 2005) Vol. 65, No. 11, pp. 4515-4519.
Refs: 20
ISSN: 0008-5472 CODEN: CNREA8

CY United States

DT Journal; Article

FS 016 Cancer
029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 30 Jun 2005

Last Updated on STN: 30 Jun 2005

AB The helix-loop-helix transcription factor Tall is required for
blood cell

development and its activation is a frequent event in T-cell
acute

lymphoblastic leukemia. The Akt (protein kinase B) kinase is a
key player

in transduction of anti-apoptotic and proliferative
signals in T cells. Because Tall has a putative Akt
phosphorylation site

at Thr90, we investigated whether Akt regulates Tall. Our
results show

that Akt specifically phosphorylates Thr90 of the Tall protein
within its

transactivation domain in vitro and in vivo.

Coimmunoprecipitation experiments showed the presence of Tall in

Akt

immune complexes, suggesting that Tall and Akt physically
interact. We

further showed that phosphorylation of Tall by Akt causes
redistribution

of Tall within the nucleus. Using luciferase assay, we showed
that

phosphorylation of Tall by Akt decreased repressor activity of
Tall on

EpB42 (P4.2) promoter. Thus, these data indicate that Akt
interacts with

Tall and regulates Tall by phosphorylation at Thr90 in a
phosphatidylinositol 3-kinase-dependent manner. .COPYRGT. 2005

American

Association for Cancer Research.

L14 ANSWER 17 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All
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reserved on STN

AN 2005489174 EMBASE

TI Transcription inhibition: A potential strategy for cancer
 therapeutics.
 AU Derheimer, Frederick A.; Chang, Ching-Wei; Ljungman, Mats
 (correspondence)
 CS Department of Radiation Oncology, Division of Radiation and
 Cancer
 Biology, University of Michigan Comprehensive Cancer Center, Ann
 Arbor, MI
 48109, United States. ljungman@umich.edu
 AU Derheimer, Frederick A.; Ljungman, Mats (correspondence)
 CS Program in Molecular and Cellular Biology, University of
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 AU Ljungman, Mats (correspondence)
 CS Department of Environmental Health Sciences, School of Public
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 University of Michigan, Ann Arbor, MI 48109, United States.
ljungman@umich.edu
 AU Ljungman, Mats (correspondence)
 CS 4306 CCGC, 1500 East Medical Center Drive, Ann Arbor, MI
 48109-0936,
 United States. ljungman@umich.edu
 SO European Journal of Cancer, (Nov 2005) Vol. 41, No. 16, pp.
 2569-2576.
 Refs: 90
 ISSN: 0959-8049 CODEN: EJCAEL
 PUI S 0959-8049(05)00712-4
 CY United Kingdom
 DT Journal; General Review; (Review)
 FS 016 Cancer
 022 Human Genetics
 030 Clinical and Experimental Pharmacology
 037 Drug Literature Index
 LA English
 SL English
 ED Entered STN: 1 Dec 2005
 Last Updated on STN: 1 Dec 2005
 AB Interference with transcription triggers a stress response
 leading to the
 induction of the tumour suppressor p53. If transcription is not
 restored
 within a certain time frame cells may undergo apoptosis in a
 p53-dependent
 and independent manner. The mechanisms by which blockage of
 transcription
 induces apoptosis may involve diminished levels of anti-
 apoptotic factors, inappropriate accumulation of proteins in the
 nucleus, accumulation of p53 at mitochondria or complications
 during
 replication. Many chemotherapeutic agents currently used in the
 clinic

interfere with transcription and this interference may contribute to their anti-cancer activities. Future efforts should be directed towards exploring whether interference of transcription could be used as an anti-cancer therapeutic strategy. .COPYRGHT. 2005 Elsevier Ltd. All rights reserved.

L14 ANSWER 18 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN DUPLICATE 6

AN 2005:365178 BIOSIS

DN PREV200510155191

TI Expression of the virulence factor, BfpA, by enteropathogenic Escherichia

coli is essential for apoptosis signalling but not for NF-kappa B activation in host cells.

AU Melo, A. R.; Lasunskaja, E. B.; de Almeida, C. M. C.; Schriefer, A.;

Kipnis, T. L.; da Silva, W. Dias [Reprint Author]

CS Univ Estadual Norte Fluminense, Ctr Biociencias and Biotecnol, Lab Biol

Reconhecer, Ave Alberto Lamego 2000, BR-28013600 Campos Dos Goytacazes,

RJ, Brazil
wds@uenf.br

SO Scandinavian Journal of Immunology, (JUN 2005) Vol. 61, No. 6, PP.

511-519.
CODEN: SJIMAX. ISSN: 0300-9475.

DT Article

LA English

ED Entered STN: 14 Sep 2005

Last Updated on STN: 14 Sep 2005

AB Localized adherence (LA) of enteropathogenic Escherichia coli (EPEC) to

epithelial cells results in attaching and effacing of the surface of these

cells. LA depends on the gene bfpA, which codes for the BfpA protein. We

found that EPEC-E. coli adherence factor (EAF)((+)), expressing BfpA,

significantly reduced HeLa cell viability in comparison with EPEC-EAF((-)), as evaluated by the mitochondrial-dependent succinate

dehydrogenase conversion of 3'-[4,5,-dimethylthiazol-2yl]2,5-diphenyltetrazolium bromide (MTT) to its formazan. Apoptosis accounts for

a substantial loss of the cell viability, because the cells incubated with

EPEC-EAF((+)) or with cloned BfpA (data not shown), but not with EPEC-EAF((-)), were positive for annexin-V binding, demonstrated chromatin condensation and nuclei fragmentation and exhibited a high level of caspase-3 activity. Because the blockade of bacterial cell-surface-associated BfpA by anti-BfpA immunoglobulin (Ig)Y antibody suppressed apoptotic death induced by EPEC-EAF((+)), BfpA may be the trigger for apoptosis. Both EPEC-EAF((+)) and EPEC-EAF((-)), as well as recombinant BfpA (data not shown), activated nuclear factor (NF)-kappa B in a similar manner as analysed by the electrophoretic mobility shift assay (EMSA). EMSA supershift analysis demonstrated the presence of p65/RelA in a DNA-binding complex. In contrast to DNA binding, NF-kappa B-dependent reporter gene transactivation was stimulated more strongly by EPEC B171/EAF((+)), suggesting a role for this virulence factor in the regulation of transcriptional activity of NF-kappa B. Because suppression of NF-kappa B activation by BAY11-7085, a NF-kappa B inhibitor, neither induced apoptosis by itself nor blocked apoptosis induction by EPEC-EAF((+)), it may be suggested that apoptosis is not regulated by the NF-kappa B pathway in HeLa cells.

L14 ANSWER 19 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

AN 2006:207893 BIOSIS

DN PREV200600209621

TI EGF receptor (EGFR) activation plays an anti-apoptotic role in CagA-dependent Helicobacter pylori-induced gastric epithelial cell apoptosis.

AU Yan, Fang; Krishna, Uma; Peek, Richard M. Jr; Kamel, Margo; Polk, D. Brent

SO Gastroenterology, (APR 2005) Vol. 128, No. 4, Suppl. 2, pp. A118.

Meeting Info.: Annual Meeting of the American-Gastroenterological-Association/Digestive-Disease-Week. Chicago, IL, USA. May 14 -19, 2005. Amer Gastroenterol Assoc. CODEN: GASTAB. ISSN: 0016-5085.

DT Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LA English
ED Entered STN: 29 Mar 2006
Last Updated on STN: 29 Mar 2006
AB Background. *H. pylori* infection significantly increases the risk of gastric adenocarcinoma through disruption of the balance between epithelial cell proliferation and apoptosis in human and rodent gastric mucosa. Increased production of cytokines, such as TNF, within *H. pylori*-infected gastric mucosa may play a pathogenic role. Although *H. pylori* has been reported to transactivate the EGFR in gastric epithelial cells, the mechanisms that regulate *H. pylori*-induced proliferation and apoptosis remain unclear. We designed these studies to test the role of *H. pylori*-activated EGFR in determining the fate of gastric epithelial cells. Methods. Immortalized wild-type (wt) mouse gastric epithelial cells (MGECS) were infected with wt *H. pylori* CagA(+) strain 7.13, or its isogenic CagA(-) or CagE(-) mutants or TNF (100 ng/ml) for 24 h. To investigate the role of EGFR activation in cell survival, cells were treated with the EGF (10 ng/ml) or EGFR Tyr kinase inhibitors (AG1478 or PD153035) for 0.5 h prior to *H. pylori* or TNF treatment. Cellular proliferation was studied using colorimetric reagent NITS. Apoptosis was detected by TUNEL staining. Caspase activity was tested using a Multi-caspase Activity assay. The level of EGFR Tyr phosphorylation was determined by immunoprecipitation and Western Blot analysis using an anti-phospho-Tyr antibody. Results. Treatment of MGECS with wt *H. pylori* significantly reduced cell numbers, this effect increased 5-fold by inhibition of EGFR Tyr kinase activity. Inactivation of cagA or cagE, or separation of wt *H. pylori* from MGECS by 0.2 μ M filter attenuated apoptosis and caspase activity in MGECS. *H. pylori*-induced apoptosis was increased 2.5-fold by inhibiting EGFR Tyr kinase activity. Importantly, pretreatment with EGF completely blocked *H. pylori*-induced apoptosis. Inhibition of EGFR activation also augmented TNF-stimulated apoptosis in MGECS. The EGFR Tyr kinase inhibitors were

shown to inhibit wt H. pylori-stimulated EGFR Tyr phosphorylation.

Conclusion. Activation of the EGFR plays an anti-apoptotic role in both H. pylori- and TNF-induced apoptosis in MGC. Since the disassociation between proliferation and apoptosis likely mediates H. pylori-induced pathogenic processes, promoting cell survival by EGFR activation may be important in regulating H. pylori-induced gastric injury, inflammation, and tumorigenesis.

L14 ANSWER 20 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights

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AN 2004450631 EMBASE

TI Transduction of the TAT-FLIP fusion protein results in transient resistance to Fas-induced apoptosis in vivo.

AU Krautwald, Stefan; Ziegler, Ekkehard; Tiede, Karen; Pust, Rainer; Kunzendorf, Ulrich (correspondence)

CS Dept. of Nephrology and Hypertension, University of Schleswig-Holstein,

Campus Kiel, 24105 Kiel, Germany. kunzendorf@nephro.uni-kiel.de

AU Kunzendorf, Ulrich (correspondence)

CS University of Schleswig-Holstein, Campus Kiel, Dept. of Nephrology and

Hypertension, Schittenhelmstr. 12, 24105 Kiel, Germany.

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SO Journal of Biological Chemistry, (15 Oct 2004) Vol. 279, No. 42, PP.

44005-44011.

Refs: 44

ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 030 Clinical and Experimental Pharmacology

037 Drug Literature Index

005 General Pathology and Pathological Anatomy

LA English

SL English

ED Entered STN: 12 Nov 2004

Last Updated on STN: 12 Nov 2004

AB Although tightly regulated programmed cell death (apoptosis) possesses

great importance for tissue homeostasis, several pathologic processes are

associated with organ failure due to adversely activated cell apoptosis.

Transient increase in apoptosis has been shown to cause organ damage

during fulminant hepatitis B, autoimmune diseases, ischemia-reperfusion

injury, sepsis, or allograft rejection. A defined and temporary inhibition of cell apoptosis may therefore be of high clinical relevance. Activation of death receptors results in caspase-8 recruitment to the death-inducing signaling complex, which initiates the apoptotic process through cleavage of caspase-8 and downstream substrates. This initial step may be inhibited by the caspase-8 inhibitor FLIP (FLICE inhibitory protein). To specifically inhibit the initiation of death receptor-mediated apoptosis we constructed a fusion protein containing FLIP fused N-terminally to the human immunodeficiency virus TAT domain. This TAT domain allows the fusion protein to cross the cell membrane and thus makes the FLIP domain able to interfere with the death-inducing signaling complex inside of the cell. We observed that incubation of lymphocytic Jurkat or BJAB cells with TAT-FLIPs proteins significantly inhibits Fas-induced activation of procaspase-8 and downstream caspases, preventing cells from undergoing apoptosis. Systemic application of TAT-FLIPs prolongs survival and reduces multi-organ failure due to Fas-receptor-mediated lethal apoptosis in mice. Therefore, application of cellular FLIPs in the form of a TAT fusion protein may open a promising, easily applicable new tool for providing protection against transient, pathologically increased apoptosis in various diseases.

L14 ANSWER 21 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN DUPLICATE 7
AN 2004:367485 BIOSIS
DN PREV200400371036
TI Intron retention generates a novel Id3 isoform that inhibits vascular lesion formation.
AU Forrest, Scott T.; Barringhaus, Kurt G.; Perlegas, Demetra; Hammarskjöld, Marie-Louise; McNamara, Coleen A. [Reprint Author]
CS Hlth Sci CtrDept Internal MedDiv Cardiovasc, Univ Virginia, Charlottesville, VA, 22908, USA
cam8c@virginia.edu

SO Journal of Biological Chemistry, (July 30 2004) Vol. 279, No. 31, pp.

32897-32903. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 8 Sep 2004

Last Updated on STN: 8 Sep 2004

AB The expression of intron-containing messages has been shown to occur in a

variety of diseases including lactic acidosis, Cowden Syndrome, and

several cancers. However, it is unknown whether these intron-containing

messages result in protein production in vivo. Indeed,

intron-containing

RNAs are typically retained in the nucleus, targeted for degradation, or

are repressed translationally. Here, we show that during vascular lesion

formation in rats, an alternative isoform of the helix-loop-helix transcription factor Id3 (Id3a) generated by intron retention is abundantly expressed. We demonstrate that Id3 is expressed

early in

lesion formation when the proliferative index of the neointima is highest

and that Id3 promotes smooth muscle cell (SMC) proliferation and S-phase

entry and inhibits transcription of the cell-cycle inhibitor p21Cip1.

Using an Id3a-specific antibody developed by our laboratory, we show that Id3a protein is induced during vascular lesion

formation and

that Id3a expression peaks late when the proliferative index is low or

declining and extensive apoptosis is observed. Furthermore, Id3a fails to

promote SMC growth and S-phase entry or to inhibit p21Cip1 promoter

transactivation. In contrast, Id3a stimulates SMC apoptosis and inhibits endogenous Id3 production.

Adenoviral delivery of Id3a inhibited lesion formation in balloon-injured

rat carotid arteries in vivo. These data describe a novel feedback loop

whereby intron retention generates an Id3 isoform that acts to limit SMC

growth during vascular lesion formation, providing the first evidence that

regulated intron retention can modulate a pathologic process in vivo.

L14 ANSWER 22 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 8

AN 2005:118894 BIOSIS

DN PREV200500117085

TI Inhibition of ErbB2 causes mitochondrial dysfunction in cardiomyocytes -

Implications for herceptin-induced cardiomyopathy.

AU Grazette, Luanda P.; Boecker, Wolfgang; Matsui, Takashi; Semigran, Marc;

Force, Thomas L.; Hajjar, Roger J.; Rosenzweig, Anthony [Reprint Author]

CS Massachusetts Gen Hosp, 114 16th St, Room 2600, Charlestown, MA, 02129, USA

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SO Journal of the American College of Cardiology, (December 7 2004) Vol. 44,

No. 11, pp. 2231-2238. print.

ISSN: 0735-1097 (ISSN print).

DT Article

LA English

ED Entered STN: 23 Mar 2005

Last Updated on STN: 23 Mar 2005

AB OBJECTIVES We investigated the effects of erbB2 inhibition by anti-erbB2

antibody on cardiomyocyte survival and mitochondrial function.

BACKGROUND ErbB2 is an important signal integrator for the epidermal

growth factor family of receptor tyrosine kinases. Herceptin, an inhibitory antibody to the erbB2 receptor, is a potent chemotherapeutic but causes cardiac toxicity. METHODS Primary

cultures of

neonatal rat ventricular myocytes were exposed to anti-erbB2 antibody (Ab) (7.5 mug/ml) for up to 24 h. Cell viability, mitochondrial function, and apoptosis were measured using

multiple

complementary techniques. RESULTS ErbB2 inhibition was

associated with a

dramatic increase in expression of the pro-apoptotic Bcl-2

family protein

Bcl-xS and decreased levels of anti-apoptotic Bcl-xL.

There was a time-dependent increase in mitochondrial translocation and

oligomerization of bcl-associated protein (BAX), as indicated by 1,6-bismaleimido-hexane crosslinking. The BAX oligomerization was associated with cytochrome c release and caspase activation.

These

alterations induced mitochondrial dysfunction, a loss of mitochondrial

membrane potential (ψ) (76.9 ± 2.4 vs. 51.7 ± 0.1 ; $p < 0.05$; $n = 4$),

a 35% decline in adenosine triphosphate levels ($p < 0.05$), and a loss of

redox capacity (0.72 +/- 0.04 vs. 0.64 +/- 0.02; p < 0.01).
Restoration
of Bcl-xL levels through transactivating regulatory
protein-mediated protein transduction prevented the decline in
psi
mitochondrial reductase activity and cytosolic adenosine
triphosphate.
CONCLUSIONS Anti-erbB2 activates the mitochondrial apoptosis
pathway
through a previously undescribed modulation of Bcl-xL and -xS,
causing
impairment of mitochondrial function and integrity and
disruption of
cellular energetics. Copyright 2004 by the American College of
Cardiology
Foundation.

L14 ANSWER 23 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All
rights
reserved on STN
AN 2004149956 EMBASE
TI Zn2+ binding to cysteine-rich domain of extracellular human
immunodeficiency virus type 1 Tat protein is associated with Tat
protein-induced apoptosis.
AU Misumi, Shogo; Takamune, Nobutoki; Ohtsubo, Yasuharu; Waniguchi,
Kazuya;
Shoji, Shozo (correspondence)
CS Dept. of Pharmaceutical Biochemistry, Fac. of Med. and
Pharmaceutical
Sci., Kumamoto University, Kumamoto 862-0973, Japan.
shoji@gpo.kumamoto-u.
ac.jp
AU Shoji, Shozo (correspondence)
CS Dept. of Pharmaceutical Biochemistry, Kumamoto University, 5-1
Oe-Honmachi, Kumamoto 862-0973, Japan. shoji@gpo.kumamoto-u.ac.jp
SO AIDS Research and Human Retroviruses, (Mar 2004) Vol. 20, No. 3,
PP.
297-304.
Refs: 54
ISSN: 0889-2229 CODEN: ARHRE7
CY United States
DT Journal; Article
FS 004 Microbiology: Bacteriology, Mycology, Parasitology and
Virology
LA English
SL English
ED Entered STN: 22 Apr 2004
Last Updated on STN: 22 Apr 2004
AB The Tat protein has several functional domains, one of which is
the
cysteine-rich domain that is a highly conserved region in spite
of the

presence of many subtypes of human immunodeficiency virus type 1 (HIV-1). Although the cysteine-rich domain is a potential site for Zn²⁺ binding, it is controversial whether Zn²⁺ is substantially essential for the structure and activities of the Tat protein. To study the significance of Zn²⁺ in the cysteine-rich domain of the Tat protein particularly released to the extracellular space, we raised the monoclonal antibody (MAb) 5A4, which has an attractive property of recognizing the Zn²⁺-binding Tat20-41 peptide but not the apo-Tat20-41 peptide. MAb 5A4 inhibited the trans-activation of the HIV long terminal repeat (LTR) in HeLa-CD4-LTR/ β -gal cells induced by treatment with the recombinant Tat protein, indicating that MAb 5A4 can recognize the full-length Tat protein and inhibit its trans-activity. The antibody also inhibited the apoptosis of Jurkat cells induced by treatment with the released native-Tat-protein-containing supernatant from the culture of HIV-1JRFL-infected cells. These results suggest that Zn²⁺, whose structure is closely associated with not only the trans-activation of HIV-LTR but also the induction of apoptosis, binds to the extracellular native Tat protein. The Zn²⁺-binding cysteine-rich domain therefore can be a molecular target in the development of an anti-Tat vaccine and agents for the control of extracellular-Tat-protein-mediated pathogenesis leading to the progression of acquired immunodeficiency syndrome.

L14 ANSWER 24 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on
STN
AN 2005:319380 BIOSIS
DN PREV200510114775
TI Transactivation of EGFR via HB-EGF shedding protects human keratinocytes from UV-irradiation-induced apoptosis.
AU Tokumaru, S. [Reprint Author]; Shirakata, Y.; Tohyama, M.; Tsuda, T.; Tan, E.; Yahata, Y.; Yamasaki, K.; Hanakawa, Y.; Sayama, K.; Hashimoto, K.
CS Ehime Univ, Matsuyama, Ehime 790, Japan
SO Journal of Investigative Dermatology, (MAR 2004) Vol. 122, No. 3, pp.

Al38.

Meeting Info.: 65th Annual Meeting of the
Society-for-Investigative-Dermatology. Providence, RI, USA.

April 28 -May

01, 2004. Soc Investigat Dermatol.

CODEN: JIDEAE. ISSN: 0022-202X.

DT Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LA English

ED Entered STN: 25 Aug 2005

Last Updated on STN: 25 Aug 2005

L14 ANSWER 25 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All
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reserved on STN

AN 2003396862 EMBASE

TI A novel strategy using single-chain antibody to show the
importance of Bcl-2 in mast cell survival.

AU Razin, Ehud

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Kingdom.

a.nissim@mds.qmw.ac.uk

AU Cohen-Saidon, Cellina; Nechushtan, Hovav; Kahlon, Shira; Livni,
Nadav

SO Blood, (1 Oct 2003) Vol. 102, No. 7, pp. 2506-2512.

Refs: 26

ISSN: 0006-4971 CODEN: BLOOAW

CY United States

DT Journal; Article

FS 016 Cancer

025 Hematology

026 Immunology, Serology and Transplantation

029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 23 Oct 2003

Last Updated on STN: 23 Oct 2003

AB Apoptosis or programmed cell death plays an important role in a
wide

variety of physiologic processes and is regulated by proteins of
the Bcl-2

family consisting of both antiapoptotic and proapoptotic
factors. The

direct involvement of the Bcl-2 protein family in the process of
mast cell

apoptosis has not been clarified. In the present work we have
used a

single-chain antibody (scFv) raised against Bcl-2 derived from a semisynthetic human phage-display antibody library. The addition of TAT sequence, which is responsible for translocation through the membrane, endows the anti-Bcl-2-scFv with the ability to penetrate living cells. Moreover, it specifically neutralizes Bcl-2 intracellularly by binding to the Bhl domain and eradicates its anti-apoptotic activity in 2 types of mast cells and in a human breast cancer cell line. .COPYRGT. 2003 by The American Society of Hematology.

L14 ANSWER 26 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN
 AN 2002:869129 CAPLUS
 DN 137:368548
 TI Zinc finger-containing transcription factor KRC protein for modulating immune responses and screening immunomodulators
 IN Glimcher, Laurie H.; Oukka, Mohamed
 PA President & Fellows of Harvard College, USA
 SO PCT Int. Appl., 164 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 2

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|----------|---|------|----------|-----------------|
| ----- | ----- | ---- | ----- | ----- |
| PI | WO 2002090595 | A1 | 20021114 | WO 2002-US14166 |
| 20020503 | | | | |
| | WO 2002090595 | A9 | 20030103 | |
| CH, CN, | W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, | | | |
| GE, GH, | CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, | | | |
| LK, LR, | GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, | | | |
| OM, PH, | LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, | | | |
| TT, TZ, | PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, | | | |
| | UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | | | |
| BE, CH, | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, | | | |
| SE, TR, | CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, | | | |
| TD, TG | BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, | | | |
| | AU 2002308605 | A1 | 20021118 | AU 2002-308605 |
| 20020503 | | | | |

US 20050026285 A1 20050203 US 2003-701401
20031103

US 7615380 B2 20091110
US 20070224653 A1 20070927 US 2006-578402

20061121
PRAI US 2001-288369P P 20010503
WO 2002-US14166 W 20020503
US 2003-701401 A1 20031103
WO 2004-US36641 W 20041103

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This invention demonstrates that KRC mols. (i.e. Kappa

Recognition

Components) have multiple important functions as modulating agents in

regulating a wide variety of cellular processes including: inhibiting

NF κ B transactivation, increasing TNF- α induced apoptosis, inhibiting JNK activation, inhibiting endogenous TNF- α expression, promoting immune cell proliferation and

immune cell activation (e.g., in Th1 cells), activating IL-2 expression

e.g., by activating the AP-1 transcription factor, activating the Ras and

Rac oncogenes, regulating PKC theta activity and increasing actin polymerization

The present invention also demonstrates that KRC interacts with TRAF.

Methods for identifying modulators of KRC activity are provided.

Methods

for modulating an immune response using agents that modulate KRC activity

are also provided.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 27 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2002:123061 CAPLUS

DN 136:179006

TI Human tumor suppressor ASP (apoptosis stimulating protein), their natural

inhibitor I-ASP and function in transactivation of p53

IN Lu, Xin

PA Ludwig Institute for Cancer Research, Switz.

SO PCT Int. Appl., 130 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 2

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

| | | | | | | |
|----------|-----|--|----|----------|----|---------------|
| PI | WO | 2002012325 | A2 | 20020214 | WO | 2001-GB3524 |
| 20010806 | | | | | | |
| | WO | 2002012325 | A3 | 20030306 | | |
| | W: | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW | | | | |
| | RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | CA | 2417368 | A1 | 20020214 | CA | 2001-2417368 |
| 20010806 | | | | | | |
| | AU | 2001076515 | A | 20020218 | AU | 2001-76515 |
| 20010806 | | | | | | |
| | EP | 1313762 | A2 | 20030528 | EP | 2001-954168 |
| 20010806 | | | | | | |
| | EP | 1313762 | B1 | 20060705 | | |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR | | | | |
| | CN | 1446228 | A | 20031001 | CN | 2001-813859 |
| 20010806 | | | | | | |
| | CN | 1310942 | C | 20070418 | | |
| | JP | 2004525605 | T | 20040826 | JP | 2002-518296 |
| 20010806 | | | | | | |
| | AT | 332309 | T | 20060715 | AT | 2001-954168 |
| 20010806 | | | | | | |
| | EP | 1710582 | A2 | 20061011 | EP | 2006-76277 |
| 20010806 | | | | | | |
| | EP | 1710582 | A3 | 20061102 | | |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR | | | | |
| | AU | 2001276515 | B2 | 20061012 | AU | 2001-276515 |
| 20010806 | | | | | | |
| | PT | 1313762 | E | 20061130 | PT | 2001-954168 |
| 20010806 | | | | | | |
| | ES | 2269430 | T3 | 20070401 | ES | 2001-954168 |
| 20010806 | | | | | | |
| | CN | 101187663 | A | 20080528 | CN | 2007-10079529 |
| 20010806 | | | | | | |
| | US | 20040053262 | A1 | 20040318 | US | 2003-343649 |
| 20030904 | | | | | | |

| | | | |
|--------------------|----|----------|----------------|
| HK 1057377 | A1 | 20061229 | HK 2003-108730 |
| 20031128 | | | |
| US 20040228866 | A1 | 20041118 | US 2004-819095 |
| 20040405 | | | |
| PRAI GB 2000-19018 | A | 20000804 | |
| GB 2000-29996 | A | 20001208 | |
| GB 2001-12890 | A | 20010526 | |
| CN 2001-813859 | A3 | 20010806 | |
| EP 2001-954168 | A3 | 20010806 | |
| WO 2001-GB3524 | W | 20010806 | |
| US 2003-343649 | A2 | 20030904 | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to the identification of a new member of a family of tumor suppressor genes (apoptosis stimulating proteins, ASP's) which encode polypeptides capable of modulating the activity of p53 and polypeptides, I-ASP, capable of modulating the activity of said tumor suppressor polypeptide. The invention related to tissue distribution of ASP proteins: both ASP-1 and ASP-2 mRNA are expressed in all the human tissues tested with the highest expression levels of ASP-1 and ASP-2 in heart, skeletal muscle and kidney. The invention demonstrates that ASP-1 and ASP-2 specifically stimulate the transactivation function of p53 on the promoters of Bax and PIG-3 and enhances the apoptotic function of all the members of p53 family, including p73 and p63. The invention also demonstrates that the pro-apoptotic function of ASP-1 and ASP-2 may be regulated by the natural inhibitor I-ASP. The invention also demonstrates that the expression levels of ASP-1 and ASP-2 are frequently down regulated in human breast carcinomas and overexpression of I-ASP is detected in 8 of the tumor tissues compared to their normal paired controls. The invention further demonstrates that ability of I-ASP to inhibit p53-induced apoptosis may make cells more resistant to cytotoxic effect of chemotherapy drugs.

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

reserved on STN

AN 2002308222 EMBASE

TI HIV-1-Tat protein activates phosphatidylinositol
3-kinase/AKT-dependent
survival pathways in Kaposi's sarcoma cells.

AU Deregibus, Maria Chiara; Cantaluppi, Vincenzo; Doublier, Sophie;
Brizzi,
Maria Felice; Deambrosis, Ilaria; Albinì, Adriana; Camussi,
Giovanni
(correspondence)

CS Cattedra di Nefrologia, Dipartimento di Medicina Interna, Osp.
Maggiore S.
Giovanni Battista, Corso Dogliotti 14, Torino 10126, Italy.
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SO Journal of Biological Chemistry, (12 Jul 2002) Vol. 277, No. 28,
pp.
25195-25202.
Refs: 53
ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 037 Drug Literature Index
004 Microbiology: Bacteriology, Mycology, Parasitology and
Virology

LA English

SL English

ED Entered STN: 3 Oct 2002
Last Updated on STN: 3 Oct 2002

AB In this study we found that Tat protected vincristine-treated
Kaposi's
sarcoma cells from apoptosis and from down-regulation of several
anti-apoptotic genes such as AKT-1, AKT-2, BCL2, BCL-XL,
and insulin-like growth factor I and induced the de novo
expression of the
interleukin-3 gene. Moreover, we found that Tat enhanced
phosphorylation
of AKT and BAD proteins. The inhibition of phosphatidylinositol
3-kinase
with two unrelated pharmacological inhibitors, wortmannin and
LY294002,
abrogated both the anti-apoptotic effect and the
phosphorylation of AKT induced by Tat. After treatment with
Tat, the AKT
enzymatic activity showed a biphasic increase: an early
activation (15
min), independent from protein synthesis; and a delayed
activation (24 h),
which was significantly decreased upon blockage of protein
synthesis.
Experiments with a function blocking antivasculature endothelial
cell growth

factor receptor-2 antibody suggested that both the early and delayed AKT activation and the protection from apoptosis were triggered by the interaction of Tat with vascular endothelial cell growth factor receptor-2. Moreover, experiments with function-blocking antibodies directed against insulin-like growth factor I/insulin-like growth factor I receptor or interleukin-3 indicated their involvement in the delayed activation of AKT and their contribution to the anti-apoptotic effect of Tat on vincristine-treated Kaposi's sarcoma cells.

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reserved on STN
AN 2002305324 EMBASE
TI Hepatitis c virus core protein inhibits apoptosis via enhanced Bcl-xL expression.
AU Otsuka, Motoyuki; Kato, Naoya (correspondence); Taniguchi, Hiroyoshi;
Yoshida, Hideo; Goto, Tadashi; Shiratori, Yasushi; Omata, Masao
CS Department of Gastroenterology, Graduate School of Medicine, University of
Tokyo, Tokyo, Japan. kato-2im@h.u-tokyo.ac.jp
AU Kato, Naoya (correspondence)
CS Department of Gastroenterology, Faculty of Medicine, University of Tokyo,
7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8655, Japan.
kato-2im@h.u-tokyo.ac.jp
SO Virology, (2002) Vol. 296, No. 1, pp. 84-93.
Refs: 56
ISSN: 0042-6822 CODEN: VIRLAX
CY United States
DT Journal; Article
FS 004 Microbiology: Bacteriology, Mycology, Parasitology and Virology
LA English
SL English
ED Entered STN: 13 Sep 2002
Last Updated on STN: 13 Sep 2002
AB Previous studies indicated that hepatitis C virus core protein influences cellular apoptosis. However, the precise mechanisms of the effects are not fully understood. Therefore, in this study, we examined the mechanisms of the effects on cell apoptosis by core protein, using transiently transfected and magnetically collected core-producing HepG2

cells. First, to elucidate the target site of core protein in the apoptotic pathway, we examined the activation of caspases after anti-Fas antibody stimulation. Core protein inhibited the apoptotic cascade downstream from caspase 8 and upstream from caspase 3. Next, to clarify more direct mechanisms of this effect, mRNA levels of several bcl-2-related genes were examined. An RNase protection assay showed that the mRNA of bcl-xl increased in the core-producing cells. We showed that this increase was mediated by the enhancement of bcl-x promoter activity by core protein through an extracellular-regulated kinase pathway. These results suggest that core protein inhibits apoptosis at the mitochondria level through augmentation of Bcl-x expression, resulting in an inhibition of caspase 3 activation. .COPYRG.T.
2002 Elsevier Science (USA).

L14 ANSWER 30 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on
STN
AN 2003:336906 BIOSIS
DN PREV200300336906
TI PPARgamma Ligand CDDO Induces Apoptosis in Leukemias Via Multiple Apoptosis Pathways.
AU Konopleva, Marina [Reprint Author]; Lapillonne, Helene [Reprint Author];
Lee, Ruey-min [Reprint Author]; Wang, Rui-yu [Reprint Author];
Tsao, Tzee
[Reprint Author]; McQueen, Teresa [Reprint Author]; Andreeff, Michael
[Reprint Author]
CS Blood and Marrow Transplantation, The University of Texas M.D. Anderson
Cancer Center, Houston, TX, USA
SO Blood, (November 16 2002) Vol. 100, No. 11, pp. Abstract No. 2209. print.
Meeting Info.: 44th Annual Meeting of the American Society of Hematology.
Philadelphia, PA, USA. December 06-10, 2002. American Society of Hematology.
CODEN: BLOOAW. ISSN: 0006-4971.
DT Conference; (Meeting)
Conference; (Meeting Poster)
Conference; Abstract; (Meeting Abstract)
LA English

ED Entered STN: 23 Jul 2003
Last Updated on STN: 23 Jul 2003
AB The peroxisome proliferator-activated receptor gamma (PPARGgamma)
is a member of the nuclear receptor family that activates transcription of target genes. We have previously demonstrated that the synthetic triterpenoid CDDO (2-cyano-3,12-dioxoolen-1,9-dien-28-oic acid), that binds and transactivates PPARGgamma, is a potent inducer of apoptosis in both, myeloid and lymphoid leukemic cells. We have now investigated the mechanisms of CDDO-induced apoptosis. CDDO induced early mitochondrial depolarization followed by activation of caspases-8, -9 and -3. In cells with low PPARGgamma levels, overexpression of anti-apoptotic Bcl-2 protected from CDDO-induced killing in HL-60/Bcl-2 cells, and inhibition of Bcl-2 via Bcl-2 antisense oligonucleotides or Bcl-2 nonpeptidic inhibitor HA14-1 restored sensitivity to CDDO cytotoxicity. To determine the criticality of caspase-8 activation, we utilized Jurkat cells with mutated caspase-8 that are completely resistant to Fas ligation by Fas agonistic antibody CH-11. These cells were effectively killed by PPARGgamma ligand CDDO, although to a lesser degree than Jurkat cells with functional caspase-8. In the absence of caspase-8, CDDO induced caspase-9 and caspase-3 cleavage. Similarly, CDDO induced apoptosis in caspase-9 knockout mouse embryonic fibroblasts. To examine potential direct effects of CDDO on mitochondria, we evaluated cytochrome c release by CDDO in cell-free mitochondria. Both, CDDO and PPARGgamma ligand Rosiglitazone induced cytochrome c release in a time-dependent fashion. The peripheral benzodiazepine receptor (PBR), along with Bcl-2, is involved in the control of the mitochondrial permeability transition complex. The combination of CDDO with PBR antagonist PK11195 (100nM), that does not induce apoptosis on its own, caused significantly increased induction of apoptosis in HL-60 cells (CDDO 1 muM, 45%; CDDO+PK11195, 82%). cDNA array analysis (Affymetrix) demonstrated that CDDO caused downregulation of the genes involved in

mitochondrial control in HL-60 and in MCF-7 breast cancer cells, including
Bcl-2, ATP synthase H⁺ transporting mitochondrial F1 complex
delta subunit
and PBR-associated protein 1. Immunohistochemical analysis of
apoptosis-inducing factor (AIF) which has been implicated in
nuclear
fragmentation as result of translocation from damaged
mitochondria into
the nucleus, showed CDDO-induced translocation of AIF from the
cytosol to
the nucleus. In summary, CDDO induces apoptosis via both,
extrinsic and
intrinsic apoptosis pathways and is capable of initiating
caspase-independent cell death as a result of direct effects on
mitochondria. These results suggest that novel PPARgamma
ligands, in
particular CDDO, have promise as novel therapy for leukemias and
other
malignancies with documented deficiencies of different apoptosis
checkpoints.

L14 ANSWER 31 OF 40 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All
rights
reserved on STN
AN 2001277757 EMBASE
TI Circulating natural IgM antibodies and their corresponding human
cord
blood cell-derived Mabs specifically combat the Tat protein of
HIV.
AU Rodman, T.C., Dr. (correspondence); Lutton, J.D.; Jiang, S.;
Al-Kouatly,
H.B.; Winston, R.
CS Rockefeller University, 1230 York Avenue, New York, NY 10021,
United
States. rodmant@rockefeller.edu
SO Experimental Hematology, (2001) Vol. 29, No. 8, pp. 1004-1009.
Refs: 33
ISSN: 0301-472X CODEN: EXHEBH
PUI S 0301-472X(01)00678-6
CY United States
DT Journal; Article
FS 026 Immunology, Serology and Transplantation
004 Microbiology: Bacteriology, Mycology, Parasitology and
Virology
005 General Pathology and Pathological Anatomy
LA English
SL English
ED Entered STN: 23 Aug 2001
Last Updated on STN: 23 Aug 2001
AB Objective: IgM antibodies reactive with each of two specifically
defined

sequences of HIV Tat protein have been identified in sera from both HIV+ and normal (HIV-) humans. This study was designed to confirm that those antibodies are innate immune factors capable of restriction of specific mechanisms of HIV pathogenicity attributed to the Tat protein.

Materials
and **Methods:** Antibody-secreting hybridomas were generated from human cord blood cells and processed for monoclonality. Those

Mabs
reactive with each of the sequences of Tat with which the circulating antibodies are reactive were isolated and their heavy and light chains identified and DNA sequenced. Pools of IgM isolated from blood of normal humans, chimpanzees, rhesus macaques, and mice and the isolated Tat reactive Mabs were tested for capacity to inhibit Tat-induced human T-cell apoptosis. Results: Human and chimpanzee IgM pools, as well as the human cord blood cell-derived Mabs, showed a definite capacity to inhibit the Tat-induced apoptosis, while the IgM pools of rhesus macaques or of mice did not. Conclusion: These studies establish that the circulating IgM of normal humans include innate antibodies capable of restriction of HIV Tat-induced pathogenesis. That capacity is shared by chimpanzee IgM but not by IgM of other primates or of mice. The identification of those human circulating antibodies as innate is confirmed by the display of similar epitopic identity and apoptosis inhibition capacity by Mabs from human cord blood cell hybridomas. Thus, the arsenal of human cord blood cell hybridomas provides a resource by which, specifically, the potential therapeutic role of the identified HIV Tat-reactive Mabs and, broadly, the fundamental role of innate antibodies in infection control may be explored. Copyright .COPYRGT. 2001 International Society for Experimental Hematology.

DN PREV200100112741
 TI Transactivation-deficient p73alpha (p73DELTAexon2)
 inhibits apoptosis and competes with p53.
 AU Fillippovich, Igor; Sorokina, Natasha; Gatei, Magtouf; Haupt, Ygal;
 Hobson, Karen; Moallem, Eli; Spring, Kevin; Mould, Michelle;
 McGuckin, Michael A.; Lavin, Martin F.; Khanna, Kum Kum [Reprint author]
 CS Queensland Institute of Medical Research, Brisbane, QLD, 4029, Australia
 SO Oncogene, (25 January, 2001) Vol. 20, No. 4, pp. 514-522. print. CODEN: ONCNES. ISSN: 0950-9232.
 DT Article
 LA English
 ED Entered STN: 28 Feb 2001
 Last Updated on STN: 15 Feb 2002
 AB p73 has recently been identified as a structural and functional homolog of the tumor suppressor protein p53. Overexpression of p53 activates transcription of p53 effector genes, causes growth inhibition and induced apoptosis. We describe here the effects of a tumor-derived truncated transcript of p73alpha (p73DELTAexon2) on p53 function and on cell death. This transcript, which lacks the acidic N-terminus corresponding to the transactivation domain of p53, was initially detected in a neuroblastoma cell line. Overexpression of p73DELTAexon2 partially protects lymphoblastoid cells against apoptosis induced by anti-Fas antibody or cisplatin. By cotransfecting p73DELTAexon2 with wild-type p53 in the p53 null line Saos 2, we found that this truncated transcript reduces the ability of wild-type p53 to promote apoptosis. This anti-apoptotic effect was also observed when p73DELTAexon2 was co-transfected with full-length p73 (p73alpha). This was further substantiated by suppression of p53 transactivation of the effector gene p21/Waf1 in p73DELTAexon2 transfected cells and by inhibition of expression of a reporter gene under the control of the p53 promoter. Thus, this truncated form of p73 can act as a dominant-negative agent towards transactivation by p53 and p73alpha, highlighting the potential implications of these findings for p53 signaling pathway. Furthermore, we demonstrate the existence of a p73DELTAexon2 transcript in a very significant proportion (46%) of breast

cancer cell lines. However, a large spectrum of normal and malignant

tissues need to be surveyed to determine whether this transdominant p73

variant occurs in a tumor-specific manner.

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reserved on STN

AN 2001006308 EMBASE

TI Smad7 is induced by CD40 and protects WEHI 231 B-lymphocytes from transforming growth factor- β -induced growth inhibition and apoptosis.

AU Patil, S.; Wildey, G.M.; Brown, T.L.; Choy, L.; Derynck, R.; Howe, P.H.

(correspondence)

CS Dept. of Cell Biology, Lerner Research Institute, Cleveland Clinic

Foundation, Cleveland, OH 44195, United States. howep@ccf.org

SO Journal of Biological Chemistry, (8 Dec 2000) Vol. 275, No. 49, pp.

38363-38370.

Refs: 59

ISSN: 0021-9258 CODEN: JBCHA3

CY United States

DT Journal; Article

FS 029 Clinical and Experimental Biochemistry

LA English

SL English

ED Entered STN: 11 Jan 2001

Last Updated on STN: 11 Jan 2001

AB Transforming growth factor- β (TGF- β) is a potent inducer of apoptosis in B-lymphocytes and is essential for immune

regulation and

maintenance of self-tolerance. Here we show that concomitant

signaling

through CD40 sustains proliferation and rescues the premature B

cell line

WEHI 231 from both TGF- β -induced and anti-IgM-induced

apoptosis. The

anti-apoptotic effect of CD40 is associated with the

transcriptional activation of the inhibitory Smad7 protein. The

transactivation of Smad7 by CD40 is NF- κ B-dependent in that

pharmacological inhibitors of this pathway,

N-tosyl-L-phenylalanine

chloromethyl ketone and pyrrolidine dithiocarbamate, abrogate

CD40-induced

Smad7 expression. Ectopic overexpression of Smad7 inhibited

Smad2

activation, TGF- β -mediated growth inhibition, and

apoptosis in WEHI 231 cells. Consistent with this result,

dominant negative interference with Smad2 and Smad3 function also

inhibited TGF- β -induced apoptosis. The inhibitory effects of Smad7 overexpression were specific to TGF- β -induced apoptosis and were without effect on anti-IgM-induced cell death. These results suggest a mechanism of suppression of TGF- β -induced apoptosis by CD40, mediated through activation of NF- κ B and, consequently, induction of Smad7 expression.

L14 ANSWER 34 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on

STN

DUPLICATE 10

AN 2000:376444 BIOSIS

DN PREV200000376444

TI Direct transactivation of the anti-apoptotic gene apolipoprotein J (Clusterin) by B-MYB.

AU Cervellera, Maria; Raschella, Giuseppe; Santilli, Giorgia; Tanno, Barbara;

Ventura, Andrea; Mancini, Camillo; Sevignani, Cinzia;

Calabretta, Bruno;

Sala, Arturo [Reprint author]

CS Laboratory of Molecular Pharmacology and Pathology, Consorzio Mario Negri

Sud, 66030, S. Maria Imbaro, Italy

SO Journal of Biological Chemistry, (July 14, 2000) Vol. 275, No. 28, pp.

21055-21060. print.

CODEN: JBCHA3. ISSN: 0021-9258.

DT Article

LA English

ED Entered STN: 6 Sep 2000

Last Updated on STN: 8 Jan 2002

AB B-MYB is a ubiquitously expressed transcription factor involved in the

regulation of cell survival, proliferation, and differentiation.

In an attempt to isolate B-MYB-regulated genes that may explain the role of

B-MYB in cellular processes, representational difference analysis was

performed in neuroblastoma cell lines with different levels of B-MYB

expression. One of the genes, the mRNA levels of which were enhanced in

B-MYB expressing cells, was ApoJ/ClusterinSGP-2/TRMP-2 (ApoJ/Clusterin),

previously implicated in regulation of apoptosis and tumor progression.

Here we show that the human ApoJ/Clusterin gene contains a Myb binding

site in its 5' flanking region, which interacts with bacterially synthesized B-MYB protein and mediates B-MYB-dependent

transactivation of the ApoJ/Clusterin promoter in transient transfection assays. Endogenous ApoJ/Clusterin expression is induced in mammalian cell lines following transient transfection of a B-MYB cDNA.

Blockage of secreted clusterin by a monoclonal antibody results in increased apoptosis of neuroblastoma cells exposed to the chemotherapeutic drug doxorubicin. Thus, activation of ApoJ/Clusterin by B-MYB may be an important step in the regulation of apoptosis in normal and diseased cells.

L14 ANSWER 35 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 2000:529878 CAPLUS

DN 133:220764

TI Requirement for glycogen synthase kinase-3 β in cell survival and NF- κ B activation

AU Hoeflich, Klaus P.; Luo, Juan; Ruble, Elizabeth A.; Tsao, Ming-Sound; Jin, Ou; Woodgett, James R.

CS Ontario Cancer Institute/Princess Margaret Hospital, Toronto, ON, M5G 2M9, Can.

SO Nature (London) (2000), 406(6791), 86-90
CODEN: NATUAS; ISSN: 0028-0836

PB Nature Publishing Group

DT Journal

LA English

AB Glycogen synthase kinase-3 (GSK-3)- α and - β are dosely related protein-serine kinases, which act as inhibitory components of Wnt signalling during embryonic development and cell proliferation in adult

tissues. Insight into the physiol. function of GSK-3 has emerged from

genetic anal. in Drosophila, Dictyostelium and yeast. Here, we show that

disruption of the murine GSK-3 β gene results in embryonic lethality

caused by severe liver degeneration during mid-gestation, a phenotype

consistent with excessive tumor necrosis factor (TNF) toxicity, as observed

in mice lacking genes involved in the activation of the transcription

factor activation NF- κ B. GSK-3 β -deficient embryos were rescued by inhibition of TNF using an anti-TNF- α antibody.

Fibroblasts from GSK-3 β -deficient embryos were hypersensitive to TNF- α and showed reduced NF- κ B function. Lithium treatment (which inhibits GSK-3) sensitized wild-type fibroblasts to TNF

and inhibited transactivation of NF- κ B. The early steps

leading to NF- κ B activation (degradation of I- κ B and translocation of NF- κ B to the nucleus) were unaffected by the loss of GSK-3 β , indicating that NF- κ B is regulated by GSK-3 β at the level of the transcriptional complex. Thus, GSK-3 β facilitates NF- κ B function.

OSC.G 481 THERE ARE 481 CAPLUS RECORDS THAT CITE THIS RECORD (482 CITINGS)

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 36 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1999:405078 CAPLUS

DN 131:54784

TI Human p53 regulatory protein RB18A and cDNA and compositions and methods

for treatment of diseases and infections

IN Frade, Raymond

PA Institut National de la Sante et de la Recherche Medicale (INSERM), Fr.

SO PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| DATE | PATENT NO. | KIND | DATE | APPLICATION NO. |
|-------------|---|------|----------|-----------------|
| ----- | ----- | ---- | ----- | ----- |
| PI 19981214 | WO 9931231 | A1 | 19990624 | WO 1998-EP8560 |
| | W: CA, JP, US | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, | | | |
| | PT, SE | | | |
| 19981214 | CA 2315275 | A1 | 19990624 | CA 1998-2315275 |
| 19981214 | EP 1037992 | A1 | 20000927 | EP 1998-966428 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | |
| | IE, FI | | | |
| 20000814 | US 6818744 | B1 | 20041116 | US 2000-581472 |
| 20030430 | US 20040052794 | A1 | 20040318 | US 2003-425970 |
| PRAI | EP 1997-403051 | A | 19971215 | |
| | WO 1998-EP8560 | W | 19981214 | |
| | US 2000-581472 | B3 | 20000814 | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB This invention relates to a 205-kilodalton protein called RB18A (Recognized By PAb1801 moAntibody), which is a p53 regulatory protein, to

the nucleotide sequence encoding said protein, and to the diagnostic and therapeutic applications thereof, in particular for the diagnosis, prevention or treatment of neoplasia. Although the RB18A cDNA was identified by anti-p53 antibody PAb1801, there was no significant homol. with p53 at the level of nucleotide or protein sequence. RB18A shared many functional properties with p53, i.e., DNA-binding, homo-oligomerization, binding to p53 and activation of sequence-specific DNA-binding by p53. The functional domains of RB18A were mapped. RB18A increased the in vivo half-life of p53. The RB18A gene was mapped to 17q21. RB18A transactivated the IGF-BP3 promoter in vivo. RB18A also inhibited p53-induced apoptosis.

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
 RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 37 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:210854 CAPLUS

DN 128:279573

OREF 128:55253a,55256a

TI Nucleic acid molecules coding for tumor suppressor proteins Bop1/ZAC and their diagnostic and therapeutic uses

IN Spengler, Dietmar; Journot, Laurent

PA Max-Planck-Gesellschaft zur Forderung der Wissenschaften E.V., Germany;
 Centre National de la Recherche Scientifique; Spengler, Dietmar; Journot, Laurent

SO PCT Int. Appl., 125 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.

KIND

DATE

APPLICATION NO.

DATE

PI WO 9813489

A1

19980402

WO 1997-EP5198

19970922

W: CA, JP, US

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,

NL, PT, SE

US 5876972

A

19990302

US 1996-718661

19960923

| | | | |
|------------|----|----------|-----------------|
| CA 2266427 | A1 | 19980402 | CA 1997-2266427 |
| 19970922 | | | |
| EP 935653 | A1 | 19990818 | EP 1997-910329 |
| 19970922 | | | |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

| | | | |
|---------------------|---|----------|----------------|
| IE, FI | | | |
| JP 2001501469 | T | 20010206 | JP 1998-515249 |
| 19970922 | | | |
| PRAI US 1996-718661 | A | 19960923 | |
| WO 1997-EP5198 | W | 19970922 | |

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Described are novel proteins having the biol. activity of a tumor suppressor protein and nucleic mols. coding for such proteins.

Methods

for the isolation of nucleic acid mols. encoding tumor suppressor proteins as well as nucleic acid mols. obtainable by said method are also provided.

The novel expression cloning technique relies on the transcriptional induction of a gene coding for a G-protein coupled receptor which in its activated form stimulates the cAMP signaling pathway which in turn results in the induction of cAMP responsive gene. Structural anal. of

Bop1 demonstrated features compatible with a transcription factor composed of a N-terminal seven zinc-finger DNA-binding domain and a C-terminal transactivation domain. The overall identity between murine

Bop1, also called ZAC, and human ZAC coding sequences was 74.6% at the nucleotide level and 68.5% at the amino acid level. Bop1 displays the ability to suppress tumor cell proliferation which could be demonstrated

by the constitutive and induced expression of said protein in transfected tumor cells. Furthermore, Bop1 is capable of inhibiting anchorage-independent growth, suppress tumor formation of transformed

cells injected in nude mice, induces apoptosis resulting in inhibition of tumor cell growth, induces G1 arrest of the cell cycle, and acts as a nuclear transcription factor. Further, vectors

comprising said nucleic mols. wherein the nucleic acid mols. are operatively linked to regulatory elements allowing expression in prokaryotic or eukaryotic host cells can be used for the production of

polypeptides encoded by said nucleic acid mols. which have tumor suppressor activity. Pharmaceutical and diagnostic compns. are provided

comprising the nucleic acid mols. of the invention and/or
comprising a
nucleic acid mol. which is complementary to such a nucleic acid
mol.

Described are also compns. which comprise polypeptides encoded
by the
described nucleic acid mols. which have tumor suppressor
activity and/or
an antibody specifically recognizing such polypeptides.

OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3
CITINGS)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 38 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1999:382 CAPLUS

DN 130:180854

TI The hepatitis B virus HBx protein inhibits caspase 3 activity

AU Gottlob, Katrin; Fulco, Marcilla; Levrero, Massimo; Graessmann,
Adolf

CS Institut fur Molekularbiologie und Biochemie, Freien Universitat
Berlin

Arnimallee, Berlin, 14195, Germany

SO Journal of Biological Chemistry (1998), 273(50), 33347-33353

CODEN: JBCHA3; ISSN: 0021-9258

PB American Society for Biochemistry and Molecular Biology

DT Journal

LA English

AB The hepatitis B virus-encoded HBx protein coactivates
transcription of

viral and cellular genes, and it is believed to play an
important role in

hepatitis B virus-related liver cancer. HBx has been shown to
alter the

coordinated balance between proliferation and programmed cell
death, being

able to either induce or block apoptosis. Here, the authors
demonstrate

for the first time that the HBx is a potent caspase 3 inhibitor.

Rat
fibroblasts (REV2) and hepatoma cells (Hep) synthesizing the HBx
protein

were resistant to various apoptotic stimuli such as growth factor
depletion, tumor necrosis factor α , or anti-Fas antibodies
administration. In these cells, HBx prevented DNA fragmentation
and cell

death in the absence of de novo protein synthesis, with a similar
efficiency as the competitive caspase 3 substrates inhibitors

VAD-FMK and

DEVD-FMK. Protein exts. obtained from the HBx pos. cells

contained a very

low caspase activity, and addition of anti-HBx antibody restored

the endogenous caspase activity. To obtain a functional map of the anti-caspase activity of HBx, various cell lines were established that synthesized either N-terminally or C-terminally truncated HBx mols. These gene dissection expts. revealed that the regions required for the anti-caspase activity overlap with the two known transactivation domains of HBx.

OSC.G 86 THERE ARE 86 CAPLUS RECORDS THAT CITE THIS RECORD (86 CITINGS)

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 39 OF 40 CAPLUS COPYRIGHT 2009 ACS on STN

AN 1998:369896 CAPLUS

DN 129:107319

OREF 129:22013a,22016a

TI Activation of nuclear factor κ B: potential role in metallothionein-mediated mitogenic response

AU Abdel-Mageed, Asim B.; Agrawal, Krishna C.

CS Department of Pharmacology, Tulane Cancer Center, Tulane University School

of Medicine, New Orleans, LA, 70112, USA

SO Cancer Research (1998), 58(11), 2335-2338

CODEN: CNREA8; ISSN: 0008-5472

PB American Association for Cancer Research

DT Journal

LA English

AB The antiapoptotic response and enhanced cellular proliferation observed in

neoplastic cells on overexpression of metallothionein (MT) have been well

documented. We have investigated the mechanisms associated with this

phenomenon by using MT inducers that increased MT transcripts and stimulated growth in MCF-7 cells. A MT antisense

phosphorothioate

oligonucleotide inhibited growth induction by >50%, suggesting a potential

role of MT in mediating the mitogenic effects of these agents.

Mobility

shift assays using oligonucleotides encompassing the consensus nuclear

factor κ B (NF κ B) binding site and anti-MT antibody

revealed activation and a specific interaction of NF κ B with MT.

Cotransfection expts. using expression and reporter constructs

demonstrated that MT caused transactivation of NF κ B. Gel

shift assays using purified proteins showed a specific

interaction between

MT and the p50 subunit of NF κ B. These data indicate that MT may be

involved in the interaction of NFκB with the DNA-binding domain
and further suggest a potential role for NFκB in mediating the
antiapoptotic effects of MT.

OSC.G 81 THERE ARE 81 CAPLUS RECORDS THAT CITE THIS RECORD (82
CITINGS)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 40 OF 40 BIOSIS COPYRIGHT (c) 2009 The Thomson
Corporation on

STN DUPLICATE 11

AN 1998:42956 BIOSIS

DN PREV199800042956

TI Induction of nitric oxide synthase is involved in the mechanism
of

Fas-mediated apoptosis in haemopoietic cells.

AU Selleri, Carmine; Sato, Tadatsugu; Raiola, Anna Maria; Rotoli,
Bruno;

Young, Neal S.; Maciejewski, Jaroslaw P. [Reprint author]

CS Dep. Internal Med., Univ. Nevada, Reno, Howard Med. Build. 320,
Reno, NV

89557-0046, USA

SO British Journal of Haematology, (Dec. 1, 1997) Vol. 99, No. 3,
PP.

481-489. print.

CODEN: BJHEAL. ISSN: 0007-1048.

DT Article

LA English

ED Entered STN: 27 Jan 1998

Last Updated on STN: 27 Jan 1998

AB Induction of nitric oxide synthase (iNOS) and production of the
toxic

metabolite nitric oxide (NO) is one of the interferon-gamma
(IFN-gamma)

and tumour necrosis factor-alpha (TNF-alpha) regulated effector
mechanisms

that can lead to apoptosis of haemopoietic progenitor cells.

Fas-receptor

(Fas-R) expression can be stimulated by IFN-gamma and TNF-alpha.

Transactivation of iNOS, and possibly Fas-R promoters, by

interferon regulatory factor-1 expressed in response to

IFN-gamma may be a

part of the iNOS transduction pathway. We investigated whether

the

effects of Fas-R triggering in haemopoietic cells were mediated

by NO. On

Western blotting, we observed that Fas-receptor agonist,

monoclonal

antibody CH11, enhanced expression of iNOS. As shown by the

reverse transcription polymerase chain reaction, CH11 also

induced iNOS

mRNA expression in purified CD34+ cells. To determine whether NO was involved in Fas-mediated apoptosis we inhibited iNOS-catalysed production of NO using anti-sense (AS) oligodeoxynucleotides (ODN) directed against iNOS mRNA. After culture of haemopoietic cells in the presence of AS-ODN, iNOS expression decreased and was no longer enhanced by Fas. This effect was associated with the prevention of Fas-mediated apoptosis, as determined by a DNA fragmentation and terminal deoxynucleotidyl transferase staining. In colony assays, specific AS-oligonucleotides prevented FAS-mediated inhibition of colony formation by total bone marrow and CD34+ progenitor cells. Our data suggest that the inhibitory effects of Fas, including induction of apoptosis, are mediated by effector mechanisms that may be similar to those described for IFN-gamma and TNF-alpha.

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| -13.12 | | |

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